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ABSTRACT

This survey was undertaken in order to assess the nature of tutoring projects that have been implemented in schools, particularly in urban schools. It was also an attempt to locate examples of a particular kind of tutoring project, one designed primarily to promote learning in the tutors. This objective is based on the assumption that secondary schools, which are increasingly facing problems of alienated, unmotivated, rebellious students, might see tutoring as a way of reinvolving these students in school. A project designed to promote learning among tutors is identified as a "Learning-by-Tutoring" project to distinguish it from other kinds of tutoring projects. The survey provides information in the following areas: (1) size and scope of existing projects; (2) implementation characteristics; (3) learning-by-tutoring projects; (4) project outcomes; (5) relationships between implementation characteristics and project outcomes; and (6) project needs. Appendices include: (a) a bibliography on tutoring; (b) a copy of the questionnaire used in the survey; (c) advice from school personnel; (d) report of visits to 14 sites; and (e) a tutoring coordinator's account of her project. (JD)

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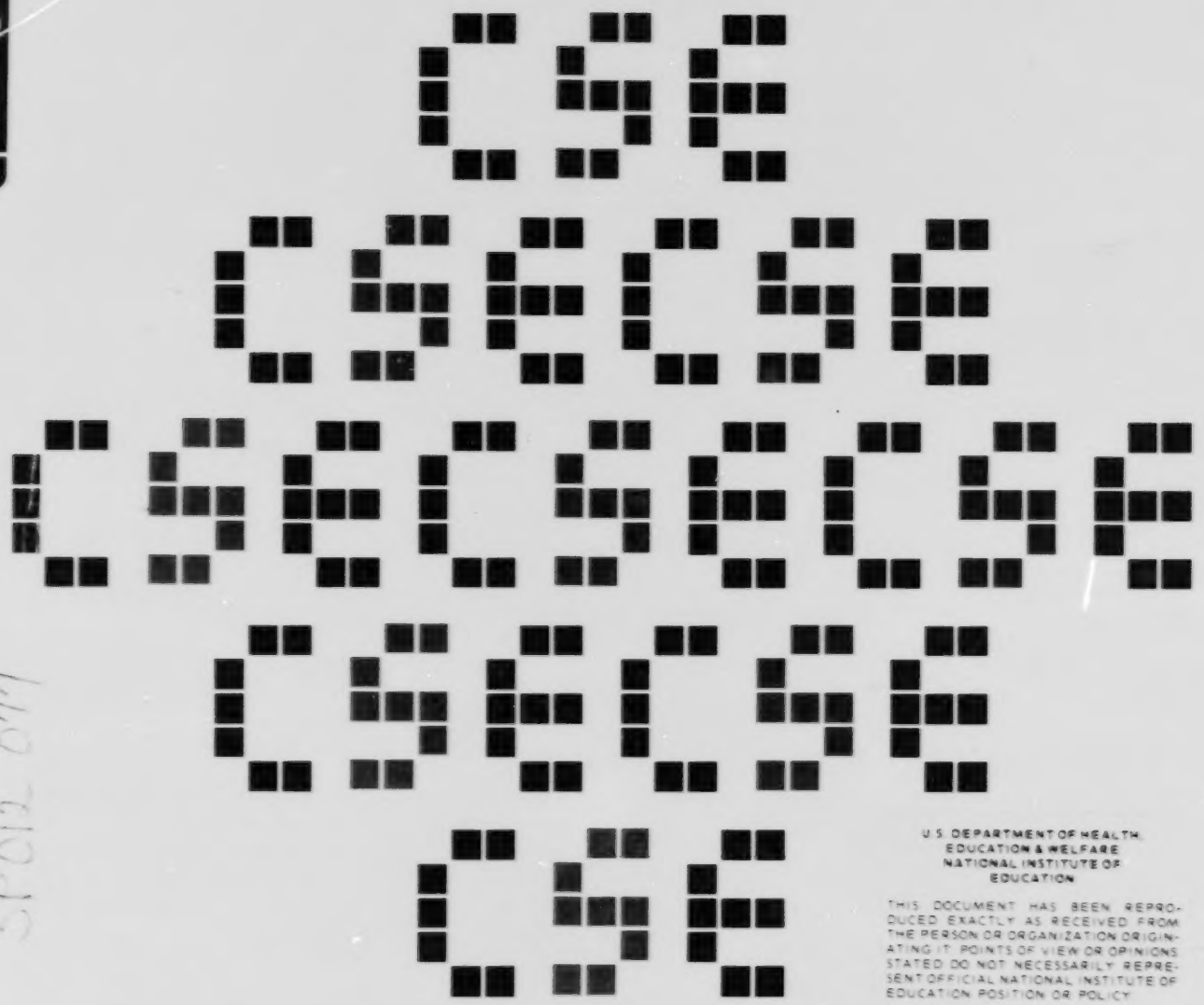

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CSE Report on Tutoring #3:
A Survey of Tutoring Projects

Carol Taylor Fitz-Gibbon

Center for the Study of Evaluation
UCLA Graduate School of Education

November 1977

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PREFACE

The National Institute of Education (NIE) is the agency of the Federal government that is specifically funded to conduct research in education. When the Education Amendments of 1974 were enacted, NIE was directed to prepare studies of compensatory education in order to assist Congress in making decisions regarding the future of efforts to improve the education of disadvantaged youth. The studies were mandated with a view to the reauthorization deliberations for Title I of the Elementary and Secondary Education Act (ESEA), scheduled to take place in 1977.

In connection with these studies, contracts were let for surveys of existing compensatory education programs, analyses of existing data on program effectiveness, research into the implications of alternative criteria for fund-allocations, and research on the administration of compensatory education. In addition, NIE requested "a systematic and interdisciplinary effort to explore alternatives to current practices in education." Four contracts were let for "Alternative Designs to Contrast with Current Practice in Compensatory Education." Each contractor was to produce "a plan of action which is deemed superior to current practice and not prohibitive in cost of implementation."

One of the contracts went to the Center for the Study of Evaluation for a proposal concerned with cross-age tutoring as a means of enhancing the learning and motivation of the tutors (in contrast to current practice in which the learning of the tutee is the primary focus).

An interdisciplinary committee of ten persons was established to meet regularly at UCLA. In addition to working with this committee, project staff undertook to develop an examination of current school practice by means of site visits and detailed questionnaires in schools conducting cross-age tutoring projects. Because the persons who ultimately implement innovations are the instructional staff, it was important to obtain their reactions to the proposed projects. Presentations were made at faculty meetings in inner city schools, followed up with questionnaires, and a small conference was held at which it was possible to obtain more detailed feedback.

Following these activities, an interim report was submitted to nine reviewers selected by NIE. Committee members and reviewers subsequently met together for two days of round-table discussions.

The production of a single final report would have been an inappropriate way of presenting the body of information that project staff had at hand following these activities. For example, much information that would be of interest to teachers and parents planning or running tutoring projects would not be of interest to policy makers and vice versa. Furthermore, although the position had been reached that one particular kind of tutoring project--the Learning-Tutoring Cycle (LTC)--should be recommended for widespread implementation in Title I projects, there was much to be said about the planning of tutoring projects in general and about highly innovative projects which, although not as immediately feasible as the Learning-Tutoring Cycle, could have greater impact if implemented.

In view of this need to speak to various audiences about diverse topics such as theories, research, policy, practical planning and innovative ideas, seven separately bound volumes were prepared: The CSE Reports on Tutoring.

Report A. The Learning-Tutoring Cycle: Overview

Report #1 Setting up and Evaluating Tutoring Projects

Report #2 Tutoring and ESEA Title I

Report #3 A Survey of Tutoring Projects

Report #4 Tutoring: Some New Ideas

Report #5 An Analysis of the Literature on Cross-Age Tutoring

Report #6 Tutoring and Social Psychology: A Theoretical Analysis

These seven reports provide an information base and a rationale for actions at both federal and local levels.

At the local level, the six numbered reports represent a resource for project planning. Three reports--the Survey (#3), the Literature report (#5), and the Social Psychology report (#6)--bring together information from a wide range of sources to provide background knowledge concerning current practice, the perceptions and recommendations of practitioners, past projects, research, and relevant theories.

This background knowledge can inform the design of tutoring projects as well as provide a basis for judging the likelihood of success of such projects. For example, the Social Psychology report demonstrates that many of the effects of tutoring widely noted by practitioners, but not yet established by research on tutoring, have their parallel in recognized effects in the field of Social Psychology. Social-Psychological theories thus suggest variables that can be assessed in research on tutoring and lend support to the perceptions of practitioners.

The three other numbered reports apply the background information to practical school planning concerns. Report #1, through a presentation of step-by-step planning questions, deals with the process of setting up and evaluating tutoring projects in general. Report #2 introduces the ESEA Title I legislation and considers the planning steps, as per Report #1, in relation to the design of an LTC project in conformity with Title I regulations. Report #4 deals with extensions of the idea of learning by tutoring to more ambitious projects, representing more substantial changes in schooling than are involved in the LTC project. Report #4 also documents the reactions of instructional staff and some Title I parents to the Learning-Tutoring Cycle and other proposed kinds of projects.

For the national level, Report A provides an overview of the project and recommendations for action. The actions recommended are designed to put the ideas of this study to the test, to see if the Learning-Tutoring Cycle can indeed significantly improve the educational attainment of disadvantaged students.

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Members of the Committee

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We were fortunate in having two ex-officio members of the committee who attended meetings because of their long-standing interest in Tutoring: Elbert Ebersole, formerly Principal, Soto Street Elementary School and now a developer of materials for cross-age tutoring in reading; and Arthur Elliott, a professor on sabbatical leave from Simon Fraser University, Canada. Their contributions were of great value to the project staff and to the committee.

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Chapter I

The Purpose of the Survey

Cross-age tutoring has had a very good press:

> . . . the educators (almost to a man) feel that tutoring works. I can think of no other innovation which has been so consistently perceived as successful (Herbert Thelen, 1969, p. 230).

> There is nothing so personally stretching--on both sides of the table --as for one student to help another, and for each to grow in the process (Carl Rogers, 1971, p. 217).

> Perhaps the most promising possibility which the total school offers in furthering the development of the child is the active involvement of older and, subsequently, younger children in the process (Urie Bronfenbrenner, 1970, p. 156).

The idea of having older students helping younger students on a one-to-one basis clearly promises many benefits beyond the individual help afforded the younger child, the tutee: students enjoy working together, the older student feels pride in helping and can be expected to learn from teaching. Improved self-concepts, attitudes to others, empathy with teachers, attitudes to school have all been widely cited as benefits from tutoring programs.

If cross-age tutoring is so beneficial to tutors and tutees, is it then in widespread use? A little acquaintance with schools suggests that most tutoring projects are small scale and peripheral rather than central to a school's program. A Phi Delta Kappan article in 1973, after describing many successful tutoring projects, concluded wonderingly, "The most promising possibility the school offers is almost entirely unexploited! Why?" (Elliott, 1973). This survey may indicate an answer to this important question.

The survey was undertaken in order to assess in some detail the nature of tutoring projects which have been implemented in schools, particularly in urban schools. The survey was also an attempt to locate examples of a particular

kind of tutoring project, one designed primarily to promote learning in the tutors. Since many studies (e.g., Frager and Stern, 1970; Cloward, 1967; Allen and Feldman, 1973; Mohan, 1972; Liette, 1971; Hassinger and Via, 1969; Sherertz, 1970) have reported beneficial and even dramatic impacts of tutoring on the tutors, it would seem reasonable to expect that secondary schools, which are increasingly facing problems of alienated, unmotivated, rebellious students, might see tutoring as a way of re-involving these students in school.

Consider, for example, a ninth grade General Math class in which once again the addition of fractions is being taught to young men and women who have year after year demonstrated their disinterest in the addition of fractions by promptly forgetting the procedure as soon as that unit of instruction was over --if they ever learned it at all. Could not this class be made vastly more interesting and effective by an announcement that next week each student would be expected to teach the addition of fractions to a fourth grader? Such an announcement achieves the first necessity of teaching--obtaining students' attention--and this time, as the teacher explains the addition of fractions, students have an immediate reason to want to learn the topic: they will need to know it in order to teach it to their fourth grader. This need is not only immediate but also intensely ego-involving. It is far more persuasive than the vaguely apprehended need for numeracy in adult life. The teacher who makes such an announcement, demonstrates how fractions can be taught, and then involves tutors in preparing materials and tests for the upcoming tutoring sessions, can be expected to find a level of cooperation and learning which is unprecedented. It was thought likely that some secondary school math classes or English classes or remedial classes would be found that were using tutoring to promote learning among tutors.

A project designed to promote learning among tutors will be called a Learning-by-Tutoring project in order to distinguish it from two other kinds of tutoring projects: Teacher Aide projects and Tutorial Service projects. In a Teacher Aide project older students essentially work as aides in the classrooms of younger students, an assignment that frequently involves such tasks as grading papers or putting up bulletin boards and may or may not involve one-to-one tutoring. In a Tutorial Service project the tutoring is

planned primarily to provide tutees with individual help. The content to be taught is selected on the basis of tutee needs, and tutors may be older students, paraprofessionals or community volunteers. Figure 1 emphasizes the difference in planning that is required by each kind of project.

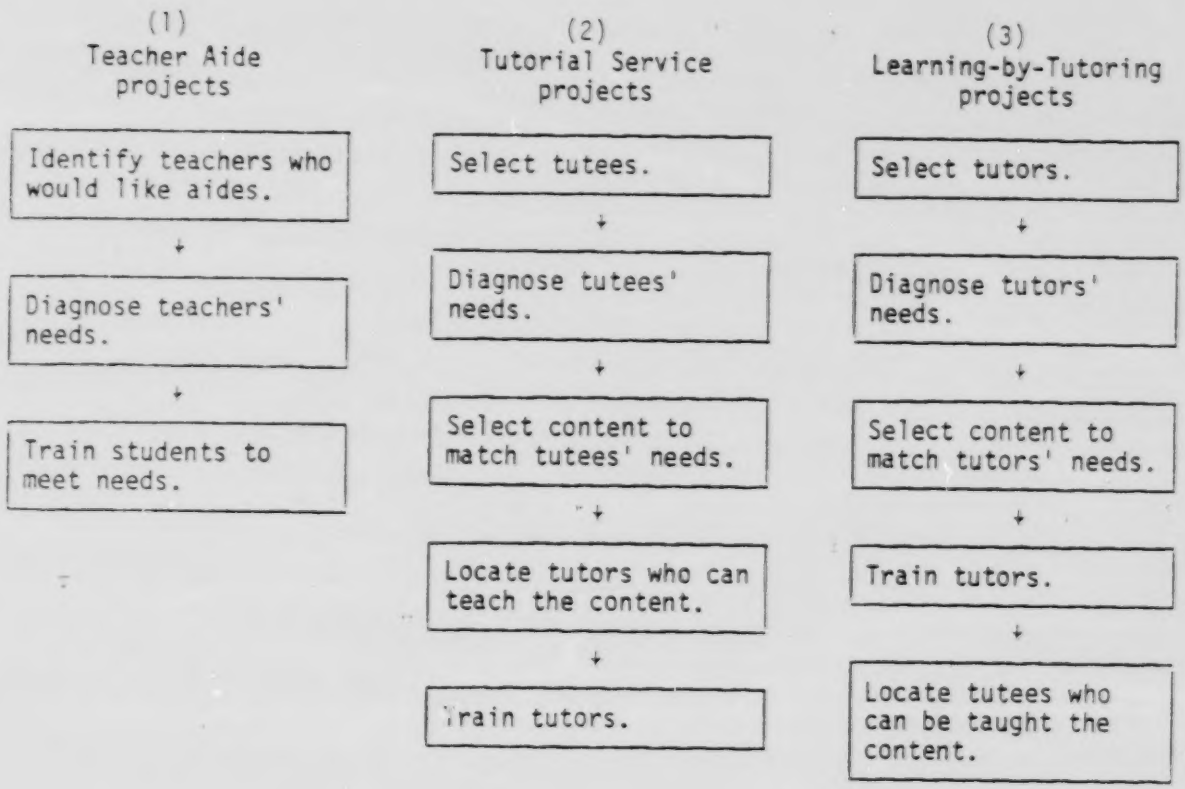

Figure 1. Contrast between planning strategies for three kinds of tutoring projects

Whereas Tutorial Service projects diagnose tutees' needs and find tutors who can provide instruction, Learning-by-Tutoring projects diagnose tutors' needs and then find tutees that can benefit from the instruction tutors will provide.

In addition to examining projects in this framework of categories, major points of concern in designing the survey were implementation characteristics (such as the time and place allocated for the tutoring activity, training procedures, etc.), project outcomes to the extent that these could be assessed (e.g., project success as perceived by teachers, administrators and students, project longevity, problems encountered) and relationships between implementation characteristics and outcomes although, as is the case with any survey or correlational study, relationships would have to be interpreted in a highly tentative fashion.

Summary

Distinctions were drawn between Teacher Aide projects, Tutorial Service projects and Learning-by-Tutoring projects. It was hoped that the survey would provide information in the following areas:

A. Size and scope of existing projects: Is the impression that tutoring projects are still primarily small scale, peripheral activities a correct one?

B. Implementation characteristics: In what ways are tutoring projects being implemented?

C. Learning-by-Tutoring projects: What kind of projects are being planned with a focus on benefits to tutors?

D. Project outcomes: What outcomes were reported or can be informed from questionnaire responses?

E. Relationships between implementation characteristics and project outcomes: Were there any significant relationships between input characteristics and outcomes?

F. Project needs. What kinds of support do persons experienced in running projects see as necessary?

Chapter II
The Survey Instrument and Sample

A "Coordinator's" questionnaire of over 200 items was designed for completion by one person at each site who was familiar with a tutoring project.* The questionnaire, which is reproduced in Appendix A, dealt with demographic details, characteristics of tutors and tutees, the kind of training provided, the location and nature of the tutoring sessions, staff and resources, perceived problems and evaluation. Two additional brief questionnaires (each less than 30 items) were provided only to sites which indicated they could administer them. There was a questionnaire for "sending" teachers (the teachers of the tutors) and a questionnaire for "receiving" teachers (the teachers of the tutees). These teacher questionnaires inquired about the responses of students in the project, the nature of the tutor's task, and perceived problems. In the remainder of this report, a reference to "the questionnaire" indicates the Coordinator's Questionnaire unless otherwise indicated.

It should be noted that the length of the questionnaire represented a decision to try to obtain details from sites willing to respond rather than to survey a very large, strictly representative sample of sites. To have taken the latter aim would have required a much briefer questionnaire and a strict sampling procedure for sites.

---

*It may be of interest to some persons to know that the questionnaire was prepared in two formats. One form consisted of 10 pages, typed in standard elite type. The other form was a 15 percent reduction of the first form, printed front and back so that it took up only 4 pages. The latter was cheaper to mail, but would people inadvertently skip pages? On the other hand, would the return rate be better because the questionnaire appeared less lengthy? The return rates for the two formats were not noticeably different. No pages were skipped on the questionnaire printed on both sides of the page.

The sample

Because compensatory education was a primary concern, the search for respondents to the questionnaire began with letters to superintendents of 42 major urban school districts located by reference to Patterson's American Education. The letters requested names of persons in their districts who were familiar with tutoring programs. Replies were received from 25 superintendents, and all but three responses provided names for further contacts. Another source of contacts was the National Commission on Resources for Youth which has provided materials and guidance for "Youth Tutoring Youth" projects since 1968. (Generally YTY projects involve secondary students tutoring during after-school hours.) NCRY personnel suggested 16 additional contacts with superintendents of whom 13 responded. Referrals from colleagues, local contacts and Educational Resources Information Center (ERIC) references provided the remainder of the sites.

A total of 181 questionnaires was mailed (48% to contacts provided by the urban schools; 11% to NCRY contacts; 34% to referrals and local contacts; 7% to ERIC references), and 94 were returned completed. Respondents were typically school principals or the coordinators of the tutoring projects. The first 82 of the returned questionnaires were coded, keypunched and used for most of the analyses that are reported here.

The sites returning questionnaires were geographically distributed as follows: West (36%), Midwest (17%), South (4%), East (11%). A major source of recruitment had been districts identified as "urban," and 54 percent of respondents described their districts as urban, 33 percent indicating "suburban." The majority of the "urban" projects reported minority student enrollments exceeding 50 percent.

The sample projects were not, on the whole, modeled on the well-known tutoring procedures. Over 50 percent stated they were not based on any model. Three projects were based on Youth-Tutoring-Youth, and three were based on the Ebersole system (Ebersole, 1976). Four were based on the work of the Lippitts (1971) including the translation of that work due to Sherertz and the Ontario-Montclair demonstration projects in California (Sherertz, 1970). Predominantly, however, projects were designed around little-known models or were self-constructed.

It is important to note that two instructions in the questionnaire were designed to bias the sample towards secondary level tutors and towards large projects. Respondents who were familiar with several tutoring projects were requested to so indicate (by checking a box) and to "choose one project to report on in this questionnaire, preferably a project that involved secondary school tutors." Seventeen percent of the respondents indicated they were familiar with several tutoring projects and can thus be expected to have reported on projects involving secondary students if possible.

In the event that projects had changed substantially in the course of operation, respondents were asked to so indicate and to report on the project at its largest. Only seven projects (8%) indicated substantial changes. Is it a myth of evaluators that projects are implemented, evaluated and either modified or expanded on the basis of the extent to which the the project is found to be successful? Possibly so. For schools, the initiative of willing personnel probably represents the decisive factor in project implementation. Indeed the role of individual initiative was illustrated on the questionnaire by an approximately 70 percent "yes" response to the question "Was the project started mainly because of one person's idea?"

Summary

A lengthy questionnaire was completed by 94 sites, and the first 82 of these responses were used in most analyses. The methods used to contact sites and the questionnaire instructions were such as to bias the sample towards large, urban projects involving secondary students. In general, projects had been started primarily by the initiative of one person, had been locally developed rather than modeled on existing projects and had not changed substantially during their existence.

Chapter III
Results

The results are presented in six sections, A through F, dealing with the areas identified in Chapter I:

A. The size and scope of existing projects

B. Implementation characteristics

C. The nature of existing Learning-by-Tutoring projects

D. Project outcomes

E. Relationships between implementation characteristics and project outcomes

F. Project needs

A. The size and scope of existing projects

Is the impression that tutoring projects are still primarily small scale, peripheral activities a correct one? This question was addressed by examining the size of projects, the resources allocated to projects, and the extent to which tutoring was a voluntary elective activity.

Size of projects. Over a third of the projects (35%) were very small, involving 20 or fewer tutors. Another 39% of the sample involved between 21 and 60 tutors, probably representing projects consisting of one or two classes of tutors. There were seven large projects involving from 100 to 300 tutors. Two of these were projects conducted within a single elementary school. (Such projects will be called "within-elementary-school" projects.) In one, the upper grade classes were paired with lower grade classes each day for 20 minutes of tutoring with tutors following the structured procedures developed by Ebersole (1971). The other involved remedial reading on a pull-out basis

for both tutors and tutees and was run with the aid of personnel from a nearby university. The remaining five large projects were secondary to elementary school projects. Two were typical Teacher Aide projects, each involving several schools. The other three large projects were all Learning-by-Tutoring projects which are described in Section C (Sites 40, 74, 87). The existence of these large projects brought the average number of tutors up to 43 although the median was 30, i.e., half the projects had fewer than 30 tutors.

Tutors generally devoted about 45 minutes per day to tutoring and quite frequently tutored one or two pupils during this time--sequentially. Only 12% of the projects reported that tutoring was not usually on a one-to-one basis. Tutoring typically took place either on two or three days a week (39% of projects) or on five days a week (45% of projects). Tutors and tutees usually spent about a semester in the project, but some spent two semesters making an average length of participation of about 25 weeks.

The figures just cited indicate that the time commitment to projects on the part of tutors and tutees was often quite substantial over the course of a semester, but the absolute number of students involved in a project at one site usually represented a rather small proportion of the student body of the participating schools. (Mean school enrollments were 607 for elementary schools, 948 for junior high schools, and 1970 for high schools.)

The size of projects located by this survey can be compared with the size of projects reported by an Office of Economic Opportunity survey in 1968. Their Tutorial Assistance Center compiled a Directory of Tutorial Projects. It is likely that many of these projects involved adult volunteers rather than students as tutors, but for comparison both distributions are shown in Table 1. Projects providing tutoring were generally smaller in the current survey than in the 1968 survey but may, as noted, have been of different kinds.

Table 1

Tabulation of Percent of Projects of Various Sizes
in Current Survey of 82 Projects
compared with the 362 Projects
in the 1968 Directory of Tutorial Projects

Size of Project*	Tutors		Tutees	
	1968	1976	1968	1976
1-20	29.3	35.2	12.4	19.4
21-40	16.3	27.9	15.2	24.2
41-60	13.3	11.0	14.6	9.8
61-80	7.5	6.0	8.3	3.6
81-100	8.8	7.3	8.6	8.5
101-200	12.4	2.4	16.9	8.4
201-300	4.4	0.0	5.2	4.8
301-400	2.2	1.2	5.8	3.6
401-500	0.8	0.0	1.7	2.4
501-750	2.2	0.0	2.2	0.0
751-1000	0.0	0.0	1.9	0.0
More than 1001	0.0	0.0	3.3	1.2
No information	1.1	8.5	3.9	13.4
	100.0%	100.0%	100.0%	100.0%

*as indicated by the number of persons involved

Resources allocated. How well supported were projects in terms of school resources? A clear indication of the extent to which a project is receiving attention is the extent to which it is receiving allocations of personnel, money and space. Only 14% of the projects had a full-time certificated teacher or counselor employed in addition to regular teachers to coordinate or supervise the tutoring. A further 6% of the projects had a part-time coordinator, but this left most projects with no single person primarily responsible. Nor did this fact indicate that projects were providing sending or receiving teachers with release time. Only 11 projects provided release time, and two of these projects belonged to the group of projects that provided a full-time coordinator. Thirteen projects employed paraprofessionals to assist the tutoring project, but again, four of these were projects with a coordinator. Overall, about 80% of the projects were run with no extra personnel assigned to them.

In very few projects were any significant amounts of money going into specially purchased materials. Only 22% of the projects reported any expenditure above normal for instructional supplies, and half of these spent less than a total of $100 on such supplies in a year. Among the projects with any expenditures, the median dollars per pupil for materials was 70¢. A few large materials-based projects that spent from $8 to $29 per pupil resulted in a mean expenditure of $4.11. The picture emerges of low cost projects with little commitment of personnel or materials.

An "index of commitment" was generated by assigning one point for each of the following indicators of a commitment to the project on the part of the school district:

- at least one certificated teacher or counselor assigned full or part-time to the project in addition to regular teachers
- at least one paraprofessional assigned to project
- at least one temporary professional employed to help start the project (e.g., consultant, in-service personnel)
- at least one substitute teacher employed for at least 40 days in the course of the year to relieve sending or receiving teachers.

- one or more other staff, full or part-time
- release time given to regular teachers in connection with the project
- expenditure of one dollar or more per pupil in the course of a year on materials especially needed for the project
- the conduct of a formal evaluation of the project
- tutoring during school hours (not before or after school)
- the provision of a room specially prepared for tutoring

Note that very minimal levels were set for projects to receive each of the 10 points. Projects in the present sample had an average commitment index of 1.88. Table 2 shows percentage of projects with various commitment scores.

Table 2

Scores on the Commitment Index

Index	Percent of projects
0	11
1	43
2	20
3	15
4	6
5	2
6	1
7	1
8	1
9	0
10	0

n=82

Voluntary nature of projects. School is not voluntary; nor are math classes or reading classes within schools voluntary. If tutoring becomes recognized as an acceptable, effective paradigm for instruction, it will most likely not be voluntary; it will simply be one mode of classroom organization. Consequently,

the fact that only four projects indicated tutors were enrolled in a non-elective course that involved tutoring added to the overall impression of tutoring projects as primarily small scale, peripheral activities, run on shoe-string budgets.

B. Implementation characteristics

In what ways are tutoring projects being implemented? To answer this question, we shall consider what kinds of students are participating as tutors, how tutors and tutees are paired, what subjects are being tutored, what kind of training and supervision is provided, whether tutors are paid or otherwise rewarded, and how many projects could be classified in the tripartite classification suggested in Chapter I: "Teacher Aide," "Tutorial Service," and "Learning-by-Tutoring" projects.

Tutors. One item on the questionnaire asked, "How were students selected to participate?" and respondents were to check as many response categories as were applicable. The percentages are shown in Table 3.

Table 3

Percentage of Projects Indicating
Some use of Various Selection Methods

Selection Method	Tutors	Tutees
volunteers	61%	18%
enrolled in an elective course for tutoring	47%	2%
enrolled in a non-elective course which involved tutoring	5%	10%
selected by teachers	46%	63%
selected because of high achievement	29%	10%
selected because of low achievement	24%	61%
selected because of leadership qualities	33%	5%
selected because of weak self-confidence	27%	34%

n=82

Typically tutors were volunteers, and tutees were selected by teachers because they needed academic assistance. Tutors were selected for low achievement (24%) almost as frequently as for high achievement (29%).

Pairing. Tutees were generally assigned to tutors on the basis of an informal judgment of compatability except in projects modeled on Ebersole (1976) in which an achievement test rank ordering is used to form pairs. Tutees generally remained with the same tutor for the duration of the project. Although methods of pairing tutors and tutees have been a subject of interest to researchers, the process is not seen as a problem by teachers. If a pair does not work well together, they can be changed in most projects.

Subject areas. Projects reported in the published literature are predominantly reading projects. In the present sample, 25% reported "reading only" as the subject matter tutors were to teach, and 48% reported "reading and math." Only one project reported "math only" and this was primarily a research and development project initiated externally to the schools. To find no school-based projects devoted exclusively to mathematics was surprising.

Training. Eighty-one percent of the projects reported that tutors receiving training prior to tutoring, and among the 15 projects not affording tutors pretraining, 7 provided "in-service" training during the project. Projects not reporting tutor training, either pre- or in-service, were primarily secondary-to-elementary Teacher Aide projects. In such projects it falls to the receiving teacher to direct the aides on a day-to-day basis.

Among the projects that provided training, the average number of hours devoted to preservice training was 5.4 (standard deviation 2.9 and range from 1 to 9 hours). Respondents were asked to estimate roughly how much of the pre-service time was devoted to subject matter, methods of teaching the subject, social skills, methods of motivating tutees or to the use of curriculum materials.

Mean scores showed subject matter content receiving least emphasis. The pattern of intercorrelations indicated that despite similar mean scores, some

projects emphasized motivation and social skills while others emphasized subject matter, methods of teaching, and the use of special materials. In other words, some projects showed a cognitive orientation in training emphasis while others emphasized social learning. In-service training usually consisted of one to two hours per week and differed from the preliminary training primarily in being more specific, dealing with particular problems that tutors were encountering.

Table 4

Emphasis in Pre-service Training of Tutors (item 17c)

Area of emphasis	n	Mean	SD	Intercorrelations 1	2	3	4
1) subject matter content (e.g., if students were to teach fractions, they were taught fractions during their training session)	58	2.48	1.06				
2) methods of teaching the subject matter (e.g., how to teach fractions)	61	3.10	0.98	.55*			
3) social skills (e.g., smiling, calling pupils by first name, showing concern)	64	3.48	0.87	.03	.16		
4) methods of motivating tutee (e.g., gaining interest, maintaining cooperation)	64	3.50	0.94	.02	.32	.70**	
5) use of curriculum materials specially made for tutoring	62	3.39	1.21	.32*	.43*	.06	.10

*$p < .01$

**$p < .001$

Most of the projects took place during school hours although as many as 15% of the projects reported some tutoring, if not all, took place before or after school hours.

Rewards for tutors. An index was created of the ways in which tutors were officially reinforced for their participation. A point was assigned for payment, course credit, special privileges, grades or preferred status. Projects reporting none of these school system rewards constituted 42 percent of the sample. Forty-three percent reported one or two such reinforcements, and 14 percent reported three or four kinds of recognition and reinforcement for tutors. The eight projects that paid tutors paid, on average, $2.66 per hour. Tutors received grades and course credit for tutoring in 43% of the projects.

Classification of projects. In Table 5 each project that returned a questionnaire has been classified by the kind of project (Teacher Aide project, Tutorial Service project, or Learning-by-Tutoring project) and by the grade levels of the students involved. Teacher Aide projects accounted for about 28% of the projects, Tutorial Service projects 62%, and Learning-by-Tutoring 10%.

The tripartite classification was not always easy to make. If a project was run by sending tutors into the receiving teacher's classroom one or two at a time, it was difficult to know if tutors performed as aides or tutors--and in fact this might have varied within a site from classroom to classroom. A clear indication of a Teacher Aide project, however, was the absence of any training. Almost always, schools provided training when the intent was that tutors should provide regular academic assistance to tutees. No within-school projects were classified as Teacher Aide projects since all within-school projects focused on the provision of tutoring rather than the general classroom assistance typical of Aide projects. The absence of within-school Teacher Aide projects in this sample should not, however, be taken as indicating that they do not exist. Assigning older students one period per day as teachers' aides on an elective basis is probably so common in secondary schools as to not be perceived as a special project. These within-school projects are not called "tutoring projects" but when teachers' aides are assigned across schools, the project becomes known as a tutoring project and reported as such. Most of the Teacher Aide projects involved senior high school students working in elementary schools.

Table 5

Kind of Tutoring Projects
and the Grade Levels of the Students Involved

		(1) Teacher Aide	(2) Tutorial Service	(3) Learning-by-Tutoring		
WITHIN-SCHOOL PROJECTS	Elem	0	23	2	25	
	Jr. High	0	1	1	2	34
	High School	0	6	1	7	
CROSS-SCHOOL PROJECTS	Sr. High → Elementary	17	7	3	27	
	Secondary → Elementary	4	4	1	9	
	Sr. High → Jr. High	0	4	0	4	55
	Jr. High → Elementary	5	9	1	15	
OTHER*		0	4	1	5	5
		26 (28%)	58 (62%)	10 (10%)		94 (100%)

*4 involved college or adult tutors, and 1 involved tutees from age 8 - 18 years in a school for the Trainable Mentally Retarded.

Most within-elementary-school projects were classified as Tutorial Service projects even though many intended that tutors, too, should improve their skills. The criterion employed was that if the tutoring content appeared to have been selected on the basis of tutee needs, the project was classified as a Tutorial Service.

Approximately 5 of the 23 within-elementary school Tutorial Service projects were what can be called "materials-based" projects: tutors followed a structured set of materials which determined the content and activities of each session.

C. Existing Learning-by-Tutoring projects

What kind of projects are being planned with a focus on the benefit to tutors? Ten quite diverse projects were classified as Learning-by-Tutoring projects, and each of these is briefly described and commented on below.

SITE #40 (Colorado). This project, which is still continuing, started in 1968 when a high school teacher wanted a solution to the problem of boredom among his students. He offered tutoring as an elective class. Tutors were to prepare lessons in such subjects as Language Arts, Mathematics, Science, Social Studies, Industrial Arts, French and even swimming. Topics were suggested by the receiving teacher which ensured appropriateness for tutees, but tutors had to prepare a full unit of instruction and have it approved by their teacher. They taught groups of four to six elementary school students.

A Learning-by-Tutoring project must almost always place great demands on the sending teacher whereas it is the receiving teacher who must usually train or instruct tutors in Tutorial Service projects. In this project the demands on the sending teachers were recognized by extra pay and release time for these teachers during the project's first 3 years. The sending teacher who completed the questionnaire made these comments:

> *The most essential component to a successful tutoring program was the amount and quality of pre-planning and preparation done by the receiving and sending teachers before school began each year and the consistency of their coordination and clarity of communication between them during the year. Some administrative support was also essential to make necessary arrangements and clear away barriers between schools such as schedule and transportation.*

Asked of the main benefit of cross-age tutoring in general, the teacher's response was:

> *the increased sense of personal worth and acceptance of adult responsibilities by the high school students as a result of their having been a tutor to younger children.*

Started 8 years ago and still continuing, this was one of the longest-lived projects located in the present survey, but a pessimistic note was sounded. Sending teachers lost their extra pay, and both sending and receiving teachers were reported as becoming "worn out" after a few years' involvement.

Site #40 was classified as a Learning-by-Tutoring project because it was initiated to cure tutor boredom, it demanded preparation of lessons from tutors in a way which would induce learning in the tutor and was primarily a method for running the tutors' class, strongly involving the sending teacher. An important characteristic was full-sequence instruction--tutors prepared and taught from scratch a curriculum unit--rather than addressing their efforts to ad hoc remediation based on tutee errors. The coordination with the receiving teacher was exemplary. Focusing on tutors need not imply a disregard for tutees. The need for ongoing support for teachers involved in this kind of high-effort project cannot be stressed too strongly.

SITE #35 (Connecticut). A Title I elementary school reading teacher ran a remedial reading project by "pulling out" low achieving sixth graders from their classes and training them as tutors for first graders. Approximately 2 hours per week was spent on the preparation of lessons by tutors, supervised by the reading teacher. Tutoring was conducted in a room specially prepared for tutoring and was closely supervised by the reading teacher who periodically perceived as "peer acceptance--both tutors and tutees involved in the learning process--mutually beneficial." Major perceived problem was teacher acceptance due, it was thought, to problems of space and materials.

Notable characteristics of this Learning-by-Tutoring project were the selection of low achieving students for tutors, their constant instruction and supervision by the reading teacher, and their preparation of lessons on topics prescribed by their teacher rather than determined by tutee deficiencies.

SITE #47 (California). In an urban junior high school, the teacher of a ninth grade Black Studies class decided that students were not functioning productively in the class because they could not read well. She decided to turn the class into a tutoring class. After a semester's training for the ninth grade tutors-to-be, seventh graders were brought in as an entire class for one period a day, 4 days a week for the remaining semester. Both the ninth grade "sending teacher" and the seventh grade "receiving teacher" supervised the tutoring sessions.

The elective was perceived as "more popular than most." Two tutors, but no tutees were dropped from the project. These outcomes and the fact that this project, started in 1971, is still continuing, and expanded to include some eighth grade tutees and elementary school students, indicated a successful project. The vice principal described the following incident as an illustration for her "very good" rating:

> *The tutor/tutee relationship in this incident kept both tutor/tutee out of "trouble." Tutor had an attendance problem before project--tutee was a disruptive student who found a motivation to come to school.*

Asked what was the main problem, she responded,

> *I don't see problems; I see a way to help students overcome reading problems and in many cases behavioral problems.*

And her advice for running a successful project was,

> *1) Back to back tutor/tutee classes; 2) Intensively trained tutors.*

SITE #87 (New York). Six elementary schools and two junior high schools in Community School District 7, New York City (the Bronx) are participating in a tutoring program using Bank Street College materials. Funds are provided by New York State "Special Need" funding which has guidelines similar to those of ESEA Title I.

Approximately 125 tutors and 300 tutees are involved each semester in tutoring basic skills--reading and math--30 minutes a day on 4 or 5 days a week. Both tutors and tutees are pulled out of class on the basis of teacher recommendations that they are low achievers. About 10 hours of training is provided for tutors, conducted by the coordinator and paraprofessionals. The training, seen by the project coordinator David Salembier as "an absolute must," stresses the use of the curriculum materials specially prepared for tutoring and social skills but also spends a good deal of time on actual subject matter content that the tutors need to learn. Tutoring is usually in the receiving teacher's classroom under his or her supervision along with that provided intermittently by paraprofessionals and the coordinator.

Asked to describe an incident that illustrated the coordinator's "very good" rating, he noted that one of a junior high school's worst behavior problems developed into a high achiever. He noted in general that tutors built up confidence, and both tutors and tutees learned. Recommendations for successful projects were:

> *highly structured, clear guidelines, full understanding of program objectives by all involved, highly visible.*

SITE #74 (California). In San Diego two reading specialists, Constance Baer and Helen Sigler, have developed a remedial reading program in which low achieving tutors (grades 4 through 12) and low achieving tutees (grades 2 through 6) are pulled out of classes to participate in tutoring. Tutoring takes place 30 minutes per day under the supervision of the reading specialists and in a room specially prepared for tutoring. Tutors receive 7 or 8 hours pre-service training and one period per week of in-service training. Emphasis is placed in training on the use of specially prepared curriculum materials and methods of teaching reading. An incident illustrating the reading coordinators' rating of the project as excellent referred to a high school student who remained in school because of the success of the program.

The five sites just described involved tutors in cognitive learning by requiring that tutors teach work they needed to learn or practice (although Site #40 had reduction of tutor boredom as a goal and perhaps for that reason involved a wide variety of content areas in which tutors would learn). Five other sites were designated as Learning-by-Tutoring projects because the tutoring was instituted primarily to meet the perceived needs of tutors, but at these sites the learning desired was not academic.

SITE #71 (British Columbia). A principal of a school for the Trainable Mentally Retarded wanted people to become more understanding of the retarded. He instituted an elective for eleventh graders which brought 10 students to the TMR school one day a week for an hour and a half. The students taught reading, math and physical education on a one-to-one basis to TMR students ranging in age from 8 to 18 years. The elective was more popular than most of the electives offered, and students frequently kept returning to the TMR school after the course was over. "Understanding and responsibility" on the part of tutors were considered the major benefits.

This was a project initiated to produce learning in the tutor--understanding of retarded students--of a kind that is difficult to measure. Thus although tutors provided a service, the project was designed initially for the tutors' benefit.

SITE #29 (Philadelphia). High school students were placed in schools, hospitals and mental health facilities to provide them with exposure to a number of careers. When projects that appear to be Teacher Aide projects are in fact designed primarily for tutors as a career experience, they too might be classified as Learning-by-Tutoring projects. With such a purpose should come a different set of requirements from those of a Teacher Aide project. The use of the tutor in the receiving teacher's classroom for one-to-one tutoring would presumably not predominate, but rather the experience should include small group work and even classroom management to provide the tutor with experiences relevant to the learning desired--career experience.

SITE #70 (British Columbia). A grade 6 class learned babysitting skills and social relations by working with babies and preschool children brought to school by their mothers 1 day a week for 2 hours.

SITE #33 (Arizona). A high school drama teacher promoted interest in his subject by having students with drama experience teach drama to new students.

SITE #83 (Missouri). A teacher of a high school family relations class had members of the class tutor at a nearby elementary school in order for them to "become aware of the developmental needs of children" and to "experience a 'helping' relationship with a child," both of which seem appropriate kinds of learning to hope for in a family relations class. Thus, this project, too, met the needs of tutors by having them teach.

From these ten sites we see, then, a few instances of teachers, particularly secondary teachers, finding in tutoring a means of instruction for their students.

D. Project outcomes

What outcomes were reported or can be inferred from questionnaire responses? Assessing outcomes is always difficult and there was, of course, no way via the survey/questionnaire of measuring the actual learning gains or social development of students. Evaluation reports were rarely available and even when achievement data were presented in such reports, the data were most usually grade equivalent gains from pretest to posttest, data which provide an entirely inadequate basis for judgment.* (For a review of measured outcomes of tutoring projects, primarily R&D efforts, dissertations and experiments, see Devin Sheehan, Feldman and Allen, 1976.) Only five projects reported using achievement tests for tutees other than standardized achievement tests.

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*There is no way to know what the gains would have been without the tutoring. Furthermore, since grade equivalent scores are frequently only interpolations based on an assumption of linear growth on the test throughout the school year, grade equivalent scores will usually over or underestimate growth to an unknown degree.

This seems to imply that tutee cognitive gains were not regularly assessed by tests specifically constructed to measure the content being taught in the tutoring sessions. On the other hand, it is possible that tutee progress was assessed but the questionnaire items (52 and 53) were not understood to be asking about this.

However, leaving aside cognitive outcomes, levels of other outcomes can be described since several items yielded an understandable, interpretable outcome metric: perceived success, project longevity, the reported reactions of students to the project (including indicators of such reactions as provided by the number of students dropping out of the project), and the perceived severity of various problems. The responses made to open ended questions about benefits and goals of tutoring will also be described.

Caution must be urged in the interpretation of these indicators of various project outcomes. None of them provides an adequate basis for judging the effectiveness of the projects; each is only an indicator of part of the whole picture. It had been hoped, prior to receiving survey responses, that formal evaluation reports would be available for many projects, but few were obtainable and none permitted strong conclusions to be drawn. This situation is par for the course. Examining the evaluations of 2000 "exemplary" projects, RMC research corporation reported, "not one . . . provided acceptable evidence regarding project success or failure. In all cases, problems in conducting and reporting the evaluations rendered the results inconclusive" (RMC, 1975, referring to Foat, 1974). In this sample, only 4 sites had control groups and only 13 (34%) gave pre as well as posttests.

Among the 46 percent of the projects that reported conducting some kind of formal evaluation, the kind of measurement most widely administered was an attitude-to-tutoring measure for tutors, probably a questionnaire asking tutors about the project. Such a measure was given at 17 sites (21% of the total sample). From the few results available, it seemed that attitudes were strongly positive. Self-attitude measures (such as sel-concept scales) were also popular, being given at 16 sites, but little interpretation was possible.

Perceived success. Projects were generally perceived by respondents in a positive light. The questionnaire respondent was asked for a general evaluation of the project. No respondents selected "very poor" or "poor"; 8% selected the choice "OK," 23% selected "good"; 42% "very good"; and 26% "excellent."

Project longevity. Table 6 shows the number of sample projects that were started in 2-year periods since 1963.

Table 6

Project Longevity

	Number of projects started	Number of projects discontinued
1962-1963	3	0
1964-1965	0	0
1966-1967	0	0
1968-1969	7	0
1970-1971	15	1
1972-1973	21	0
1974-1975	30	14
No information	6	—
TOTAL	82	15

Life of discontinued projects:	Mean 2.9 years Range 1 to 5 years
Life to date of all projects:	Mean 3.7 years Range 0 to 14 years

The preponderance of projects recently started should not be taken as representing a national trend since the sample could be expected to be biased towards new projects both because superintendents and staff might be aware of newly started projects more than of old continuing projects and because

respondents would be less likely to bother to fill out a questionnaire for a project that finished some years ago. Only 15 questionnaires were returned that described discontinued projects; these projects had had an average life of about 3 years.

Reported reactions of students. Among problems suggested on the questionnaire and to which respondents reacted on a 5-point scale, were two questions regarding students' interest in participating in the project. Lack of interest was termed "definitely not a problem" for tutors among 62 percent of projects and for tutees among 71 percent of the projects. Only 9 percent of the respondents reported lack of tutors who wished to participate as a problem, and the figure was only 7 percent for tutees. These findings conform with the usual reports of enthusiasm for projects from students (a very important aspect of tutoring: there are not many ways of mounting a direct attack on basic skills which students enjoy). However, wanting to participate initially and wanting to continue to participate are different matters, and the responses for "some tutors lost interest in teaching" showed this to be one of the relatively more frequently perceived problems. Twenty-four percent acknowledged this as a problem for the project.

In addition to the perceptions of the coordinators, there were available the perceptions of those closest to the students day to day: the sending and receiving teachers. Separate questionnaires asked teachers how their students (tutors or tutees) responded to tutoring. Four response categories were provided and teachers were asked into which category participating students fell. The categories were formed from a 2x2 matrix with initial attitude (eagerness or reluctance to tutor) crossed with final attitude (see Table 7).

Table 7

Student Responses to Tutoring:
Mean Percentages of Tutors and Tutees
Judged by Teachers to Fall
into four Categories of Response to Tutoring

	TUTEES		TUTORS	
	Lost interest or did not enjoy	Enjoyed tutoring	Lost interest or did not enjoy	Enjoyed tutoring
Initially eager	10%	76%	14%	78%
Initially reluctant	4%	10%	2%	6%
	14%	86%	16%	84%

The estimates made by sending and receiving teachers showed very similar reactions among tutors and tutees. Among tutors, 78% fell in the category "were eager at first and stayed eager," and among tutees the figure was 76%. Fourteen percent of the tutors were reported by their sending teachers as losing interest after initial enthusiasm; for tutees the corresponding percentage was 10%. These estimates by teachers indicate that loss of interest can pose severe problems for some projects. Information is needed on which kinds of students lose interest in which kinds of projects. If the students who lose interest are the same set whom the schools constantly find "unreachable," then tutoring is just another innovation. If the usually unreachable students are not the ones who lose interest, then tutoring is a very important innovation. A field experiment (Fitz-Gibbon, 1976) found that students rated worst for classroom behavior were the ones most interested in being tutors after 3 weeks' experience of tutoring.

If tutors lose interest, they may cease to act responsibly in a project and be "dropped." Coordinators were asked if any tutors were dropped from the project for lack of responsible behavior during tutoring, and if so how many. About

half the projects indicated that some tutors had been dropped. However, three quarters of projects dropping tutors had dropped only one, two or three students, and only one project had dropped as many as five tutors.

One further indicator of student response was the coordinator's report as to the popularity of tutoring in situations in which it was offered as an elective, in competition with electives such as craft subjects, drama, etc. There were 38 responses indicating this popularity. Three coordinators (8%) indicated tutoring was "the most popular elective" and 15 (38%) indicated tutoring was "more popular than most." Thus a total of 46% of these tutoring projects appeared to be at least among the more popular of the electives offered. Only one project reported tutoring as the least popular elective and 5 (13%) reported tutoring "less popular than most." The remaining projects (35%) were reported as "average" in popularity.

Perceived severity of various problems. Some indication of the outcomes of a project can be elicited by asking what problems arose during the project. In Figure 2, the responses made to a litany of problems is displayed. Respondents were asked to indicate on a 5-point scale the extent to which each suggested problem occurred. Modal responses to all but four problems were "This was definitely not a problem"; but problems were clearly scattered throughout the projects. Figure 3 represents for each problem the percentage of respondents who felt the problem probably existed or definitely existed in their project. The problem of scheduling was reported by 52% of the projects, whereas parental objections received no affirmative responses. A single intense problem--such as scheduling--can seriously hamper a project's functioning and can certainly prevent its expansion.

The least problem was "parental objection." Eighty-eight percent of the respondents indicated this was definitely not a problem. Apparently there is little objection to the kind of tutoring projects currently in existence. Many projects indicated, in fact, such positive outcomes as "tremendous community support."

Problems Suggested	percent responding in each category* 1	2	3	4	5	mean response	graph of mean response 1 2 3 4 5
Objections							
1-parental objection to the project	(88)	11	1	0	0	1.1	
2-some objections from teachers at receiving school	(57)	29	5	8	1	1.7	
3-some objections from teachers at sending school	(64)	21	4	9	5	1.7	
4-not enough teachers who wanted to participate	(62)	21	5	9	2	1.7	
5-legal constraints (e.g., course credits, supervision problems, credential problems)	(70)	22	3	4	1	1.5	
Resources							
6-tutoring project personnel were overworked	32	(42)	8	14	4	2.2	
7-not enough time to train tutors	(35)	15	13	25	11	2.6	
8-shortage of space or facilities	(38)	19	13	21	9	2.4	
9-more demand for tutoring than we could accommodate	(24)	23	13	20	20	2.9	
10-shortage of transportation for tutors	(67)	7	5	10	10	1.9	
11-not enough administrative assistance	(51)	23	6	13	8	2.0	
12-insufficient appropriate curriculum materials	(48)	25	16	8	2	1.9	
Student Attitudes							
13-not enough tutors who wanted to participate	(62)	24	2	9	5	1.6	
14-some tutors lost interest in teaching	26	(32)	17	19	5	2.4	
15-some tutors caused problems at the receiving school	(49)	34	7	10	0	1.8	
16-some tutees became uncooperative	(42)	36	6	15	0	1.9	
17-not enough tutees who wanted to participate	(71)	9	2	6	1	1.5	
Procedures							
18-some receiving teachers not using tutors wisely	(33)	(33)	12	16	6	2.3	
19-excessive noise associated with tutoring	(45)	37	11	7	0	1.8	
20-scheduling problems (trying to match tutor hours to tutee hours)	19	23	6	(32)	20	3.1	

○ indicates the "mode" (most frequently chosen response)

Key Categories:

1-This was definitely not a problem
2-I do not think this was a problem
3-Uncertain
4-I think this was a problem
5-This was definitely a problem

Figure 2. Percentage of projects choosing responses to the questionnaire item, "To what extent were the following problems encountered in your project?"

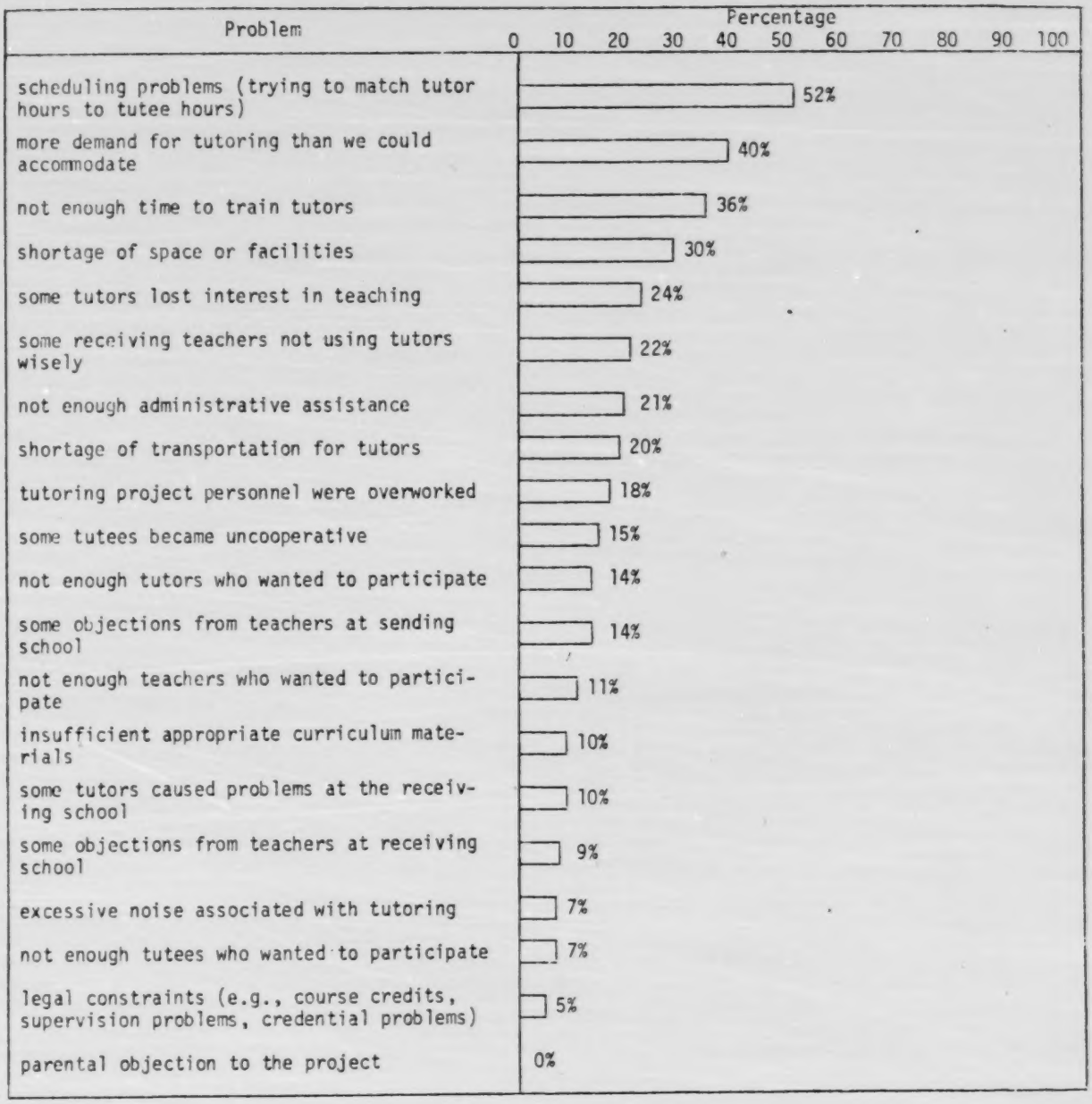


Figure 3. Percentage of projects acknowledging various problems (sum of responses 4 and 5 to item #49)

As mentioned, the most frequently perceived problem among those listed was "scheduling--trying to match tutor hours to tutee hours." This is a problem which can stymie many a would-be project and one largely out of the control of teachers; it is administrators who draw up schedules.

Second only to scheduling problems was the rather positive "problem" of "more demand for tutoring than we could accommodate." The distribution of responses on this item was bimodal. Some projects were perceived as in high demand, and about equal numbers did not feel an unmeetable demand for their services.

The problems which a rank ordering of response means placed third, fourth (tied), and sixth were, respectively, "not enough time to train tutors," "some tutors lost interest in tutoring," "shortage of space or facilities," and "some receiving teachers not using tutors wisely." It is easy to see how each of these problems arises in the typical Teacher Aide project. With just one or two tutors arriving per classroom, the receiving teacher still has responsibility for practically an entire class. Frequently, only a hurried conference with the newly arrived tutor is possible and then the tutor must manage whatever task has been assigned. The coordinator, if the project is lucky enough to have one, must keep track of many tutors spreading out to many classrooms so that communication with receiving teachers becomes a problem.

The following abstracts showing the problem as perceived by the coordinator and then as perceived by the receiving teachers are instructive:

> The coordinator of an inner-city project in which eighth grade volunteers were pulled out of class for a few weeks to work in elementary school classrooms, reported the following as "the main problem likely to be encountered:" *Acceptance and proper utilization of tutors by receiving teachers.*
>
> Receiving teachers, however, cited the following problems on their questionnaires:
>
> - *Sending the tutors at times when we did not expect them.*
> - *On one occasion a tutor was sent who could not cut or copy.*
> - *No information was sent on tutor before he entered the classroom to work.*

- *The time the tutors came to my class and the time spent was inconvenient for me and not long enough.*
- *Didn't realize until too late that students were to be tutors. I didn't have time to train them.*

A receiving teacher in another Teacher Aide project which provided tutors with no pre-service or in-service training listed the following problems:

- *Low ability and behavior level.*
- *Tutors came in the middle of class; teacher has to stop class and instruct the tutors.*
- *Tutors yell, chew gum, are rowdy and noisy; boy tutors flirt with girls.*

An elementary school teacher, referring to an aide project involving high school students, wrote: *I felt it was unsuccessful (at least in my room) because students came to get out of class. They watched the clock and had excuses to leave early.*

Perceived benefits. Open-ended responses on a questionnaire avoid prompting and can be valued as a way of tapping salient attitudes. Respondents to this survey were frequently interested enough to write extensively in response to open ended questions, and this section deals with these self-expression items.

There were three open-ended items at the end of the questionnaire. One asked about the project's goals and another about the benefits to be expected from tutoring in general. The third was an item immediately following the question that asked for an overall evaluation of the project, and it read "Please describe an incident that you recall from the project which illustrates why you make this evaluation." This request for an anecdote can be seen as tapping recalled critical incidents of the project.

The first two responses on each item were coded as falling into one of four categories and as referring to either the tutors or the tutees. The four categories were: cognitive (e.g., academic learning or remedial instruction); attitude-to-self (e.g., self-esteem, self-confidence, self-concept); attitude-to-others (e.g., liking, caring, helping); and attitude-to-school (e.g., enjoyment, cooperation, attendance). In Table 8, the distribution of responses to the three items is displayed.

Table 8

Numbers of kinds of Responses to three Open-ended Items
Regarding Project Goals, General Benefits and Recalled Critical Incidents

	FOR TUTORS			FOR TUTEES		
CATEGORY	Goal	General benefit	Recalled critical incidents	Goal	General benefit	Recalled critical incidents
cognitive achievement	19	11	5	47	21	13
attitude to others	8	22	11	2	10	4
attitude to self (e.g., self esteem)	15	19	11	7	11	2
attitude to school (e.g., enjoyment)	0	7	18	2	6	11

The most frequently mentioned goal was tutee cognitive gain which was mentioned more than twice as often as tutor cognitive gain. Among non-cognitive goals, however, the goal of improved tutors' attitudes-to-self were predominant. This pattern confirms the experience of site visits: projects are designed to help tutees learn and to give tutors the experience of helping and responsibility, with the anticipation that they will benefit in such areas as self-concept.

What was perhaps surprising is how few projects reported, among the first two goals they wrote down, goals in the area of attitude to school, such as student enjoyment and attendance. It would seem to be a major virtue of tutoring that it is a generally enjoyable activity. Is student enjoyment not seen as a good reason for implementing a tutoring project? Of course, reasons expressed on a questionnaire may be those that look official in some way. The fact that self-concept is frequently measured by published instruments may cause it to be mentioned as a goal. The term "self-concept" may also serve as a proxy for the simple hope that students will smile more and be more cooperative. (What is perhaps needed are published, norm-referenced scales to measure enjoyment of school and then, perhaps, we shall see enjoyment of school mentioned as a goal of projects.)

The request for an anecdote (recalled critical incidents) yielded results that suggested that neglect of attitude to school in goal statements did not necessarily blind respondents' perceptions. The most frequently mentioned critical incidents related to tutors' attitude to school. For example, reporting from a non-voluntary Teacher Aide project in a black inner city high school, the coordinator noted:

> *Attendance at tutoring remained consistently constant whereas attendance often proved a problem in the regular program; students often reacted personally and warmly in the tutoring situation in a manner they would not normally behave with their peers.*

Several projects reported improved attendance by tutors, indicative presumably of an improved attitude to school. Frequently the lasting effects of a project were mentioned:

> *Tutors keep coming, after course completed.*
>
> *The high school students often developed close personal bonds with some of their tutees or their sending teacher that lasted several years after they graduated from high school.*
>
> *A number of my students have decided to pursue careers in education or a field working with children. One of my students tutored an ill 7 year old nephew for 6 months and kept him on grade level while he was unable to attend school. She used our Volunteer notebook and library books as teaching aids.*

At the conclusion of the experience and the following year, many olders wanted to know if we could do it again.

For tutees, attitude to school was the non-cognitive observation most frequently mentioned. Overall, the salient critical incidents recalled were in the realm of attitudes rather than cognitions, by more than 3 to 1. This could be an artifact of the way the question was posed--"describe an incident"--but it probably also reflects the basis on which projects are judged: by their immediate observed impact on students' behavior rather than by observations of achievement. Fewer than 20% of the projects had reported that any achievement tests were given, and about the same percentages had reported measuring attitudes to self and/or attitudes to tutoring.

However, several respondents did note quantitative data as having influenced their evaluation:

Tutor vs. non-tutors growth in reading 15.4% higher, math 5.1% higher using CTBS September-May growth 1971-1973.

A fifth grade tutor who didn't read well at the beginning increased his reading achievement by four grade levels one year.

Posttest achievement data, when comparing tutored vs. non-tutored control groups, showed statistically significant differences favoring tutored groups in concepts and computational skills.

A number of tutors advanced 2 years in reading on posttest. Average gain for 9 month period was 12 to 18 months.

Among the salient critical incidents reported were several that illustrate effects of tutoring that are widely believed to exist although research on these effects is sill to be conducted. For example, many persons have argued (e.g., Zaccharias, 1965; Gartner, Kohler and Riesman, 1971) that tutors gain insight into the material they teach, and many persons have experienced this process themselves, noting how much more thoroughly they know something once they have taught it. And among the critical incidents we find:

A seventh grade girl would regularly exclaim that she really understood something she was teaching to a second grader--for the first time.

Likewise, tutoring is often seen as a means of solving some social problems, such as inter-group conflicts and high dropout rates. The following reports suggested tutoring is perceived as contributing to the solution of such problems:

> *Good individual personal relationships developed between foreign-born tutees and black tutors (tutees had previously been fearful of black students).*
>
> *Potential dropout found worth in himself because others depended on him.*
>
> *Students at high school remained in school because of success in this program.*
>
> *Children who disliked school would come on the day they were tutored.*

For many years, discipline has been perceived as the principal problem confronting schools, according to Gallup polls. Several critical incidents reported amelioration of behavior problems:

> *A troublesome grade 7 student became very involved with his grade 1 tutee and became generally far more tolerant.*
>
> *Several difficult grade 6 girls became most cooperative in their general school work and attitude.*
>
> *The principal of one of our YTY schools exclaimed that the school's worst behavior problem developed into a high achiever.*

In short, respondents saw their projects positively, and both cognitive benefits and non-cognitive benefits were widely believed to have resulted from the practice of older students helping younger students to learn. Respondents noted many instances of improved attitudes to school including improved attendance and cooperation, reported long-term impact of many projects and, in the cognitive area, noted some dramatic individual gains and some significant group differences in favor of the those tutored or tutoring.

E. Relationships between implementation characteristics and project outcomes

Were there any significant relationships between input characteristics and outcomes? Given the nature of survey data in which respondents with their own yardsticks measure a single project, without any anchor point or reference to other projects, strong relationships between inputs and outputs can hardly be expected. With a sample size of 82, quite weak correlations are "statistically significant," but only very tentative hypotheses can be generated from examination of these correlations. Only statistically significant relationships (at $p = .05$ or less) are reported below unless otherwise indicated. To avoid cluttering the text with correlation coefficients, the differences between most of which were hardly significant, a correlation can be assumed to fall between .20 and .30 if it is reported as significantly different from zero, but its particular size is not reported.

Outcomes are examined first in relationship to the types of projects--Teacher Aide, Tutorial Service and Learning by Tutoring--and then some general expectations are tested.

Type of project and reported outcomes

Reference back to Table 5 shows that the number of cases in some categories was quite small. In particular, there were only ten Learning-by-Tutoring projects, and these were described in Section C. They were quite diverse and could hardly be thought of as a homogeneous group. Consequently, Learning-by-Tutoring projects were excluded from the following analysis although they are reported for the sake of completeness.

A statistical examination of dependent variables was made only for the three categories of projects in which it seemed possible that there were sufficient numbers of cases to make adequate estimates. The three categories were:

(1) Teacher Aide projects (n=26)

(2a) Tutorial Service projects between secondary and elementary schools (n=26)

(2b) Tutorial Service projects within an elementary school (n=23)

In Table 9 mean scores on selected outcome indicators are presented for the three types of project. Analyses of variance occasionally showed differences among means of borderline significance, but on the whole there were no strong trends. Outcomes not displayed in Table 9 were even more homogeneous across these three types of project.

There were, for example, no significant differences across project types in parental objection--uniformly low. Surprisingly, scheduling was not reported as significantly more of a problem for cross-school projects than for within-school projects.

Teacher Aide projects had been in existence longer than either within- or cross-school Tutorial Service projects and were generally more highly rated by the respondent. There was a slight tendency for cross-school Tutorial Service projects to have dropped more tutors for irresponsible behavior and to mention tutor attitude to self as a benefit less often.

Testing some expectations

The survey was undertaken largely because the idea that low achieving secondary students tutoring in basic skills in elementary schools would be an effective method of compensatory education. A number of expectations are reflected in this idea:

- that low achieving students can be successful tutors
- that secondary school students can best tutor in elementary schools
- that tutoring is of value in compensatory education situations
- that tutoring should become a central, rather than a peripheral, school activity
- that a cognitive orientation to tutoring (as implied by the use of tutoring for basic skills) is more productive than a social skills emphasis in planning.

A questionnaire is a quite inadequate means of providing strong evidence regarding these expectations, but the data may point in one direction or another and add to the accumulation of evidence by means of which such complex social science questions receive tentative answers.

Table 9

Selected Outcomes for Three Kinds of Projects

	MEAN (SD) FOR TYPE OF PROJECT					
	Cross-school Teacher Aide (1) (n=26)	Cross-school Tutorial Service (2a) (n=26)	Within elementary Tutorial Service (2b) (n=23)	F from ANOVA	p	Learning-by-Tutoring (n=10)
Coordinator's evaluation of project	5.2 (1.0)	4.5 (1.0)	4.9 (0.9)	2.99	.06	5.2 (0.6)
Life of project	5.1 (1.9)	3.7 (2.2)	3.3 (2.7)	3.06	.05	4.6 (2.06)
Perceived demand	3.3 (1.7)	2.9 (1.5)	2.6 (1.4)	0.91	.41	2.9 (1.7)
Tutors dropped from project for lack of responsible behavior (1=yes, 2=?, 3=no)	2.1 (1.0)	1.5 (0.9)	2.1 (0.9)	2.61	.08	1.9 (1.1)
Tutor attitude to self mentioned as a general benefit	0.28 (0.46)	0.05 (.22)	0.33 (.48)	2.76	.07	0.20 (0.42)
Tutee attitude to self mentioned as a general benefit	0.11 (0.32)	0.05 (0.22)	0.24 (0.43)	1.62	.21	0.00 (0.00)

The use of low achieving as opposed to high achieving students as tutors. Differences on the outcome variables between projects that had selected tutors for low achievement as opposed to projects that had selected tutors for high achievement were significant only for the problem "tutors caused problems at the receiving school." It was not a case, however, of all low achieving tutors having caused trouble at the receiving schools--or in the receiving classrooms. The problem showed significantly greater variation among projects with low achieving tutors ($F = 3.56$, $p = .02$) and, on a one-tailed test using a separate variance estimate, a higher mean tendency to see tutor behavior at the receiving school as having been a problem ($t = 1.76$, $p = .05$). This result could be expected if one anticipates that trouble in school and low achievement are frequently associated. Even so, the problem was not reported as severe. The modal response to "tutors cause problems in the receiving school," among projects with exclusively low achievers as tutors, was "I do not think this was a problem"--a score of "2" (See Figure 2) and the mean response was 2.2, slightly on the way to the "uncertain" category.

This finding represented only a weak trend and there was a lack of significant differences for the other dependent variables--for example, there was not a greater number of tutors dropped from projects employing low achievers as tutors, and there was not a significant difference in demand, or coordinators' evaluations. These findings seem to indicate that the use of low achieving students as tutors results in variable outcomes depending probably on how the project is run, but that schools generally manage with low achieving students as tutors almost as well as with high achieving students.

The involvement of secondary school students as tutors. In this survey, in which a special effort was made to contact and obtain responses from projects involving secondary students, 64 projects involving secondary schools were located as opposed to 25 projects that existed entirely within elementary schools. Nine of the secondary projects took place within the secondary school, but the large majority were cross-school projects.

Even given the induced bias in the sample, finding more than twice as many secondary as opposed to elementary projects was surprising, especially since these involved the trouble of cross-school scheduling. There may be several

explanations for this. One is that secondary schools often become involved in tutoring only because a nearby elementary school requests tutors. About a third of the sample projects were initiated because of a request from the receiving school for tutorial services. Another reason for the preponderance of cross-school rather than within-school projects involving secondary students may be--it was thought--the reluctance of secondary schools to pair up their adolescents; visits of great amounts of time going to socializing and dating may act as deterrents. Additionally, the expectation that taking large secondary school students into the Lilliputian world of an elementary school will have a desirable impact by impressing the tutees and by inducing a sense of responsibility in tutors, may also encourage the implementation of cross-school rather than within-school tutoring for secondary students.

The within-secondary-school projects were examined to see if fears of wasted time or generally problem-ridden projects were well founded, but they appeared not to be. The overall ratings of the within-secondary-school projects were high, and problems were no more in evidence than generally. However, two aspects were noticed that probably reflect common characteristics of the age range being dealt with--junior and senior high school adolescents.

First, the reactions of tutees, as reported independently by several receiving teachers, fell into the category of initial reluctance to a much greater extent than was generally the case (contrast Table 10 with Table 7). Embarrassment might well have been high initially, adolescents being much concerned with their image among peers. Strikingly, however, this initial reluctance was overcome, and the final distribution of students between those enjoying and not enjoying tutoring was almost precisely the same as in the majority of projects in which the tutees were elementary school students.

Table 10

Reactions of Tutees in Within-Secondary-School Projects
(Mean percentages)

	Lost interest or did not enjoy	Enjoyed tutoring	
Initially eager	5.5%	48%	53.5%
Initially reluctant	10.5%	37%	47.5%
	16.0%	87%	100.0%

Secondly, we see the effect that once adolescents overcome initial reluctance, they form peer relationships that are closer, during adolescence, than their relationships to adults. The following quotations from the questionnaires illustrate this observation:

> *In one class there was a boy who was so retarded in reading that he absolutely refused to read for the teacher or paraprofessional, although they tried for 2 weeks. The teacher asked for a female tutor to talk to him. Soon afterwards he began to respond and is now progressing while working exclusively with the tutor.*

> *There is less pressure on a student to perform for a tutor than for a teacher. A tutee will tell his tutor things that he would not reveal to a teacher. This relationship allows for a more honest atmosphere.*

> Seen as a main benefit of tutoring--*the willingness of younger students to accept assistance from older students more readily than they would from adults.*

> *Tutors proved to be an asset because they supplied a model of sorts which the tutees could identify with positively.*

It seemed, then, that reluctance to implement within-secondary-school tutoring is probably unnecessary. In fact tutoring appears to deal effectively with one of the problems that secondary schools are most concerned with: student cooperation. For example, Hoffmeister ran a 9th grade to 7th grade tutoring project in reading in an inner-city junior high school. She noted:

> *The supervisor of the (seventh grade) tutees . . . remarked that in September the twenty tutees in each class were very "rambunctious and playful." It was difficult to get them to work in this large group because their need for help was so great. When each student was assigned a tutor in December the whole atmosphere of the class changed, and it became a classroom "alive with work." Discipline problems, she noted, became almost non-existent* (Hoffmeister, 1973, p. 26).

In summary, secondary school students are being involved in tutoring projects both cross-school and within their own junior and senior high schools. Outcomes of cross-school Tutorial Service projects appear to be at least as good as those obtained by within-elementary-school Tutorial Service projects, and fears that within-secondary school projects might not be successful were not supported by the data.

The value of tutoring in compensatory education situations. Reference back to Figure 2 will indicate that the "positive problem"--more demand for tutoring than the project could meet--had a bimodal distribution. Omitting "uncertain" responses, two groups were defined: "high demand" and "low demand." Presumably a school in which there is a high perceived demand for tutoring has a tutoring project that is perceived as desirable, perhaps because the need for it is very great and/or because it is a very good program. An interesting finding that possibly supports the notion that tutoring may be especially effective in compensatory education situations, was the finding that high demand projects had significantly lower average percentages of white tutors and tutees, as shown in Table 11.

Table 11

Relationship between Minority Enrollment and Perceived Demand for Tutoring

	percent white tutees				percent white tutors			
	n	$\bar{X}$	SD	t	n	$\bar{X}$	SD	t
high demand group	27	74.9	26.8	3.11**	30	75.4	29.9	1.59*
low demand group	28	50.2	29.5		26	62.2	32.9	

*p = .06 (one tail) **p = .001 (one tail)

However, with one exception no other significant differences were detected between urban, minority or Title I schools and schools not likely to receive compensatory education funds. The one exception was a finding of significantly more variation among suburban schools on the item "not enough administrative assistance" and a significantly higher mean on this item for suburban schools (2.4 as opposed to 1.5 for urban schools) indicating less administrative support in the responding suburban schools.

The suggestion that tutoring should become a central rather than peripheral school activity. Few projects could be said to have made tutoring a central school activity. Tutoring was almost invariably an elective class, the exceptions being a few elementary schools and one senior high school. In the latter case a Teacher Aide project was run with a tenth grade English class, and staff were becoming critical of the arrangement since tutors (the teacher aides) were clearly not spending much, if any, time on tenth grade English. With students working as aides 5 days a week, what they would do, and therefore what they would learn, was entirely dependent upon the decisions of the receiving teachers.

In addition to tutoring being non-elective, two other variables can be seen as indicative that tutoring is being accorded recognition, rather than being a small scale project run "out-of-hide" by teachers: the index of commitment and the size of the project. Unlike the elective/non-elective variable, these two variables contained reasonable variance so their correlates could be examined.

There was a significant positive correlation between the index of commitment and an index of student problems (created by summing positive responses to items 13, 14, 15, 16, 17 and 19 on Figure 2 and adding a point each if either tutors or tutees were dropped from the project.) At first blush it would seem that this positive correlation hardly supports the thesis that schools should commit more resources to tutoring, since greater resources appeared to be associated with more student problems. But, perhaps the more difficult projects to run received more resources. Or, perhaps it was simply a matter of large projects being associated with more problems, but the rate of problems being the same in both large and small projects.

Greater commitment of personnel and resources was also associated with objections from sending and receiving teachers and lack of teacher interest in participating. Are coordinators forcing a project on unwilling teachers, i.e., is it the mode of implementation that is a problem--teachers are not "brought aboard" from the beginning?

Unfortunately, surveys can almost never provide evidence as to what causes observed relationships, and this survey is no exception. The weak positive correlations just discussed, although statistically significant, accounted for a negligible 10% or less of the variance. But they do serve as a warning that increasing the scale and ambition of a project may lead to increased resistance, at least in the Tutorial Service or Teacher Aide projects such as are currently in existence. On the other hand, the larger projects (associated with larger commitment, $r = .45$) received significantly higher ratings from respondents despite the larger number of perceived problems.

If we turn from problems and coordinators' evaluations as outcome measures to perceived demand, we find that the average number of hours spent in pre-service training was significantly higher for the high-demand group--6.6 hours as opposed to 4.8 hours (see Table 12). The high demand projects also spent more time on in-service training of tutors (2.4 as opposed to 1.4 hours per week), but this difference was not statistically significant.

Table 12

Amount of pre-service training provided to projects that reported more demand for tutoring than they could meet as opposed to that provided by projects not perceived as in high demand

	n	$\bar{X}$	SD′	t	p
high demand projects	29	4.79	3.2	-2.39	.02
low demand projects	25	6.64	2.4		

Perhaps what we see here is an example of the principle that it isn't the resources per se but how they are used that determines project outcomes. Thus a particular use of resources--for extensive training of tutors--presages success, but the mere presence of resources may simply reflect large as opposed to small projects and may not influence success.

A cognitive orientation to tutoring as opposed to a social skill orientation. Many practitioners (Sherertz, 1975; Robertson, 1971; the Lippitts, 1971; Newmark, 1976) stress the necessity of training student tutors in social skills such as how to set the tutee at ease, how to use positive reinforcements, understand the tutee's problems, motivate the tutee, etc. As was shown earlier, training sessions differed in that some displayed an academic learning orientation, emphasizing subject matter, methods and materials for tutoring sessions, while others displayed a social skills orientation.

There seems always to intrude into any activity concerning human interactions the tough-minded vs. tender-minded leitmotiv which shows up variously labeled and manifested: realistic vs. idealistic, concerned with achievement vs. concerned with attitudes, rationalistic vs. humanistic, hard-nosed vs. touchy-feely, etc. With regard to tutoring, these issues surfaced not only in questions of the training of tutors (should training emphasize subject matter content to promote effective cognitive achievement or should it emphasize social and motivational skills so that the tutor establishes a warm rapport with the tutee?) but also in such issues as should tutors be given adult-like responsibilities--contacting parents, meeting as a group without teachers to plan their own tutoring, training new tutors, supervising tutees in situations other than tutoring--or are such expectations unrealistic? What do the data from the survey show regarding the kind of variables that flag the ambience of a project as academic or social skills oriented?

One statistically significant finding was that projects that fell in the "low demand" group had reported placing more emphasis on social skills during training than had projects that were in the "high demand" group (t = 1.74, p = .04 one tail).

The task assigned to the tutor must surely be one of the crucial influences on the tutor's sense of interest in and responsibility for the tutoring. As has been indicated in preceding sections, tutors have not always been highly motivated. The task can be seen as having two components: content (subject matter area to be taught) and methods (activities to be used). Both content and methods could be either prescribed or left open to the tutor.

In projects in which the choice of subject (content) to be taught each day was left to tutors, significantly more projects reported "tutors caused problems at receiving school" (t = 2.91, p = .009, means were 1.6 and 2.6) suggesting lack of task involvement on the part of tutors. However, in projects in which tutors were left to choose activities (methods) (as opposed to having activities prescribed by the receiving teacher or dictated by the materials used), there was more perceived demand (t = 2.87, p = .009), and problems at the receiving school were not reported more than otherwise. Furthermore, the coordinators' evaluations were significantly higher in projects in which tutors chose activities: 5.4 as opposed to 4.4 (t = 3.04, p = .006). These findings are consistent with the view that assigning tutors to tutor in a clearly defined subject matter area, but with responsibility for their own selection of methods, leads to the more effective projects.

When tutors met alone, there were significantly more objections from sending and receiving teachers, more lack of teacher interest, and again more problems from tutors at the receiving school. If tutors sometimes dealt with tutee discipline problems, again there were significantly more objections from receiving teachers, lack of teacher interest, and lower demand for tutoring. If tutors trained other tutors, more parents objected and again a lack of teacher interest in participating in the project was reported. However, a greater number of respondents mentioned tutors' benefits in self-concept, although fewer saw benefits in tutors' attitudes-to-others.

Giving tutors responsibility for tutees out of the classroom was associated with higher evaluations by the coordinator, greater mention of tutors' benefits in attitudes-to-others, but fewer mentions of tutee cognitive benefits and fewer mentions of tutee benefits in attitudes-to-self.

There has been a very strong effort on the part of Federal agencies to increase the involvement of parents in schools, as for example, in ESEA Title I projects and in California's Early Childhood Education projects. If tutors communicated with parents, the projects also tended to report that the staff were more overworked. Cognitive benefits and attitude-to-others benefits for tutors were significantly more often mentioned in projects in which tutors communicated with parents, and these projects lasted longer (5.4 years as opposed to 3.5 years, $t = 3.09$, $p = .003$). This latter finding may indicate simply that the projects were Teacher Aide projects which, as seen earlier, have been in existence longer, in this sample at least, than Tutorial Service projects.

Again, the limitations of a survey must be emphasized. Causal interpretation cannot be drawn from correlational data. In the present instance, the data seem to indicate less acceptance of projects in which tutors are given significant responsibilities. Is this to be interpreted as resistance to change, as evidence of failure of humanistic projects or as an association between laissez-faire implementation and dissatisfaction? We do not know.

The best we can say is that, for this sample, we have found from studying statistically significant relationships, that:

- low achieving students have been tutors without excessive problems
- secondary school to elementary school tutoring was not associated in this sample with more problems than within-elementary-school tutoring
- fears that within-secondary-school tutoring would not be successful appear to be unfounded
- larger projects with a greater commitment of resources received higher ratings from respondents but also reported more severe problems
- choice of subject matter or content by tutors was not associated with positive outcomes in this sample, but choice of the daily activities or methods used by tutors was associated with positive outcomes
- delegation to tutors of significant responsibilities beyond tutoring was not associated in this sample with positive outcomes

- a high perceived demand at the site of the tutoring project for the services of tutors may be an indicator that the project was meeting an important need; high perceived demand was associated with--

  --minority student enrollment

  --projects in which more hours were devoted to the training of students before they tutored

  --projects that placed relatively less emphasis on social skills during training

F. Project needs

What is needed? One further set of data from the survey is relevant to any efforts to promote the wider use of cross-age tutoring in schools. In item #48 respondents were asked, "If you were to run another tutoring project in the same school(s), how important would you expect the following to be?" There followed a list of possible resources and staff. Responses were made on a 5-point scale from "not needed" to "essential." Figure 4 shows the percentage of respondents that indicated each suggested item as either "important" or "essential." The items have been rank ordered by their responses.

The first six items, all selected as important or essential by over 30% of projects represent a desire for school level management of a project by the provision of staff time for planning and for making or purchasing materials. The positive response to "progress tests for tutees" perhaps represents a recognition of the need to ensure, by monitoring, that effective tutoring is taking place.

Only 17 percent of the respondents saw consultants as important or essential. Few respondents added other needs in the two items that gave an opportunity for such additions: "other personnel," "other resources." This might indicate exhaustion in completing the questionnaire, but most respondents wrote vigorously to the end of the questions. Rather the lack of other suggestions is taken as indicating that the items suggested represent a reasonably comprehensive list of the needs for running projects: school-made curriculum

materials, or money to purchase materials, progress tests for tutees, and extra professional staff (such as a coordinator), and/or release time for teachers for planning.

Rank of Item	Item	Percentage (0 10 20 30 40 50 60 70 80 90 100)
1	School-made curriculum materials	40%
3	Progress tests for tutees	36%
3	Extra professional staff	36%
3	Release time for teachers for planning	36%
5	Money to purchase supplies	34%
6	Purchased curriculum materials	33%
7	Aides (paraprofessional adults)	25%
8	Transportation	21%
9	Consultants	17%
10	Other personnel	11%
11	Other resources	8%
12	Money to pay tutors	6%

Figure 4. Percentage of respondents (n=77) who judged that an item would be either "important" or "essential" were they to run another project in the same school

In summary, what is needed is staff time and materials, the latter being preferably school-made (which implies more staff time). Very few respondents thought money to pay tutors was important or essential.

In Appendix C, the questionnaire respondents are quoted verbatim to allow them to speak for themselves directly. The quotes are their responses to the question, "How should a project be run to make it successful?"

Chapter IV
Discussion and Conclusions

Is the good press enjoyed by cross-age tutoring justified? Do educators "feel that tutoring works" (see Chapter I)? On the whole, yes. But this judgment does indeed represent a "feeling"; there is little in the way of strong evaluative data available from most school projects in operation today. Moreover, these projects appear to have the prospect of being rather short lived, three or four years on average.

However, a wealth of written comments and responses on the questionnaires, along with the experience of site visits (Appendix D), indicated that when tutoring does work, it brings with it a spectrum of perceived benefits that covers most of the areas that schools consider important: cognitive learning (this applies especially to tutees in the kind of projects presently implemented); improved attitudes-to-school reflected in enjoyment of tutoring by tutors and tutees alike, improved school attendance, and more cooperative attitudes from previously "difficult" students; improved attitudes-to-self among tutors who respond to the responsibility they are given and to the tutee's admiration, and among tutees who find a friend and a confidante in their tutor; improved attitudes-to-others, an effect that has been used to overcome inter-group fears and prejudices and that has been reflected in empathy for teachers from tutors, and more and better cross-age relationships both in the school and in the community at large.

But tutoring hasn't worked for all students. But then, does anything? A widespread impression, supported by one set of experimental results (Fitz-Gibbon, 1976) suggests that tutoring "reaches" students who do not fit in well in the regular classroom. More research and evaluation on this question is needed. Some tutors lose interest, and some have been noted to be clockwatchers or even troublemakers rather than helpers. The currently dominant practice of using volunteers as tutors does not guard against such possibilities; students

can volunteer to tutor in order to avoid something else or to have a lark. Even though such dubious motives might be rare, volunteering for an activity does not automatically mean one does the activity well or even that one likes the activity once experienced.

Perhaps Bronfenbrenner struck the right note by connoting cross-age helping as "Perhaps the most promising possibility that the total school offers..." (emphasis added).

What is needed to bring this possibility to fruition and obtain the benefits that so many projects observed while avoiding the problems some encountered? A necessary but not sufficient condition is that cross-age tutoring be allowed to take place. This requires scheduling tutors and tutees to meet with reasonable frequency under reasonable conditions, something which necessitates administrative support and the allocation of space and facilities. Many current tutoring projects receive a miniscule commitment of personnel and resources, and it seems likely that such a situation contributes to the small scale, peripheral, short-lived nature of present projects. Many projects were initiated by, and are run on the enthusiasm of one or two teachers.

However, far more than a time and a place for tutoring is required for the success of a project. Probably the most crucial aspect is the extent to which the implementation characteristics of a project lead to tutors' involvement in their role. Do tutors know, each day, what to teach? Do they try to teach? Do they perceive their teaching as effective? If this involvement can be achieved, the spectrum of benefits mentioned earlier is likely to ensue.

Are there any clues from this survey as to the implementation characteristics that lead to successful tutor involvement? Some characteristics relating to the tutors' task and training were found to have been associated with positive outcomes such as a greater perceived demand for tutoring or fewer problems. Whether these characteristics caused success or just happened to be related to other unknown factors that were the real causes of success is not known, although some processes that might be at work will be discussed. The tutor task or training characteristics showing statistically significant associations with positive outcomes were:

- subject matter to be taught prescribed for the tutor
- activities or methods of teaching left to the tutor to choose
- more hours spent on pre-training of tutors
- less emphasis in training on social skills

Some of the processes that might be at work, and which these variables would flag, will be suggested by considering what each variable implies. The prescription of subject matter to be taught has many implications. First, it represents an orientation of the project towards deliberate cognitive instruction, not a vaguely specified rendering of assistance where needed. It indicates also that the teacher, who prescribes the subject matter, knows the tutee's needs and wishes the tutor to meet them--this attaches a serious purpose to the tutoring task and represents a delegation to the tutor of a task normally reserved for adults--cognitive instruction. Students are often assigned to care for younger students (e.g., babysitting) but rarely to instruct them. Such an assignment carries status.

On the other hand, by leaving the tutor to choose <u>how</u> to teach the subject matter (the second variable--activities), the tutor is given responsibility and room for initiative and is not simply used as a vehicle for administering a program of instruction.

The other two variables imply pre-training of several hours duration and little emphasis (this does not mean no emphasis) on social skills during this training. Again, these variables connote a serious task orientation toward cognitive instruction. Tutors are not thrown in unprepared to tutor having received instructions to be sympathetic. They know what to teach and have studied the content and possible methods in pre-training.

Possibly, then, these variables lead to involved tutors, tutors who perceive a meaningful task for themselves--a perception which places them in a meaningful relationship vis-à-vis the tutees. Now how do these variables relate to possible kinds of organizational patterns for tutoring? This link, from task variables to organization variables, is crucial because it is the organization variables which must first be directly planned for and implemented.

Someone must be free to provide pre-training for the tutors. If the tutors constitute an entire class, then the teacher of that class can provide pre-training and can also subsequently help to supervise the actual tutoring. If, on the other hand, tutors are pulled out of various classes to tutor, then either there must be release time for a teacher (sending or receiving teacher), or a coordinator must train the tutors. The alternative is to leave the specification of subject matter and the pre-training to the receiving teachers. Unless relieved of their classes, they rarely leave time to undertake this task thoroughly.

This line of argument suggests that the use of an intact class of tutors rather than a pull-out program is desirable. Two statistically significant results not previously mentioned support this position. Contrasting projects which used intact classes of tutors as opposed to a pull-out selection, it was found that in projects using intact classes there were fewer reported problems of "lack of training" ($t = 1.83$, $p = .03$, one tail) and fewer tutors were reported as losing interest ($t = 1.53$, $p = .06$, one tail).

Another organizational variable that can be hypothesized as influencing tutors' task orientation is the decision to implement a Tutorial Service project vs. a decision to implement a Teacher Aide project. A Tutorial Service project is designed to provide instruction in areas in which tutees need instruction. Frequently in such a project, tutees are gathered together to receive help from tutors, and the tutors can prepare their instruction ahead of time. In a Teacher Aide project, tutors are typically scattered among many classrooms to help teachers on an ad hoc basis in whatever way they need help. Tutors may receive only hurried instructions from teachers each day and can rarely prepare instruction ahead of time. Frequently, they do not in fact tutor but perform other jobs such as grading or materials preparation.

It must be noted, however, that in this survey measured outcomes were not found to be worse for Teacher Aide projects than for Tutorial Service projects. This lack of measured negative effects might have been due to the wide diversity of ways in which Teacher Aide projects were implemented. However, the problems of

lack of training and supervision, resulting in uninvolved tutors, were vividly described by some teachers who had experienced Teacher Aide projects. These teachers' perceptions, quoted in Chapter III, Section D, should serve as a warning in a choice between a Teacher Aide project as opposed to a Tutorial Service project.

The discussion so far has concerned the kind of projects most widely found at present: Tutorial Service and Teacher Aide projects. A major purpose of the survey was to try to locate projects that had been implemented specifically to promote learning in the tutors, i.e., Learning-by-Tutoring projects. Ten such projects were located. These diverse projects, described in Chapter III, Section C, included five which were implemented with learning goals in such non-academic areas as babysitting, understanding of the Trainable Mentally Retarded, and drama appreciation. Of the five that involved academic learning goals, three were in schools eligible for compensatory education, and two involved secondary students as tutors. (The reader may recall that a proposal for Learning-by-Tutoring projects as a means of compensatory education for secondary students led to this series of reports to which this survey belongs.) One was the large scale, materials-based project in the Bronx (David Salembier), and the other was a within-junior-high-school tutoring class that grew out of a Black Studies class. Both projects have grown considerably in the few years in which they have been in existence, and it seems reasonable to urge further trials of compensatory education projects that induce learning and motivation among secondary students by assigning them to, and preparing them for, tutoring roles.

Further consideration of the task and organizational variables that must be considered in planning tutoring projects is provided in CSE Report on Tutoring #1: Setting up and Evaluating Tutoring Projects. Plans for a particular kind of Learning-by-Tutoring, called the Learning-Tutoring Cycle, are described in Report #4: Some New Ideas.

Conclusion. Without doubt, tutoring projects have high potential not only for remediating deficiencies in back skills or improving other kinds of academic learning, but also for improving the interpersonal relationships that constitute

so much of the fabric of a community and contribute so subtly to the quality of life. As Jerome Bruner wrote

> ...when we read Urie Bronfenbrenner's perceptive analysis of the isolating tendency within American society to grade and segregate by age, one realizes that the idea of each teaching another may indeed be a revolutionary step toward maintaining community in a society where the forces of urban organization, of mass production, and indeed of mass education are all centrifugal (p. 62).
>
> The contemporary effort to construct our schools is, I think, part of the general effort to reduce isolation, to re-establish mutuality and exchange. Sharing one's skills and knowledge with others, being teacher as well as learner are efforts to that end.
>
> Perhaps superintendents, principals, and school boards may have to be lured with pragmatic rationale. It is not the right reason for adopting this plan. It is a bonus. The real reason should be to get us an inch on the way toward making the helper and the helped the universal unit of exchange within a culture that continues to produce lonely crowds, lonelier than ever (p. 63).

What is urgently needed is a widespread implementation of tutoring projects accompanied by well designed evaluations that attempt to detect non-cognitive as well as cognitive effects and that contrast the benefits of tutoring with those of other innovations of similar cost.

And cost is unavoidable. To quote Richard Mallory, professional associate at the National Education Association:

> The major factor inhibiting wider use of the technique is one of management. As a matter of administrative convenience, it is easier to keep one group of students with one teacher in specified time slots....teachers will need time to plan lessons that utilize tutors as an integral part of the activity, and they will need time to organize the actual movement of tutors within or among classes. They will also need time to evaluate together the results of the activities for both tutors and tutees. Currently teaching assighments just do not permit this kind of time. Getting time involves money, money for substitutes and money to pay for training programs.

In short, teachers who have managed to run projects on a shoe string should receive greater support, more teachers should have an opportunity to explore tutoring (especially the underused Learning by Tutoring paradigm), and through evaluations should be planned of what is "perhaps the most promising opportunity that the total school offers."

APPENDICES

Reading About Tutoring

The following CSE Reports on Tutoring are available from the Center for the Study of Evaluation, UCLA Graduate School of Education, 145 Moore Hall, Los Angeles, California 90024.

A. The Learning-Tutoring Cycle: An Overview

An overview of the entire project and recommendations for actions which are designed to put the ideas of this study to the test--to see if the Learning-Tutoring Cycle can indeed significantly improve the educational attainment of disadvantaged students.

#1. Setting up and Evaluating Tutoring Projects

A listing and explanation of decisions that must be made at each school site when a tutoring project is started. Pros and cons for each decision are presented for discussion. A step-by-step outline of evaluation activities is included.

#2. Tutoring and ESEA Title I

A guide to setting up a tutoring project that conforms to Title I requirements and benefits both secondary and elementary school students. Of particular interest to Title I planners, parents, teachers and district personnel.

#3. A Survey of Tutoring Projects*

A nationwide survey of tutoring projects and a description of site visits to some existing tutoring projects.

#4. Tutoring: Some New Ideas

Description of a specific approach to tutoring in which the focus is on the learning and motivation of the tutors. Included also are ideas on expansion of tutoring to provide significant educational alternatives, as in a School-Within-A-School project. The reactions of teachers to the ideas are documented.

#5. An Analysis of the Literature on Cross-Age Tutoring

A literature review that examines both laboratory studies and in-school programs to identify important issues in tutoring.

#6. Tutoring and Social Psychology: A Theoretical Analysis

An examination of tutoring from the perspective of social psychology. Presents operationalized hypotheses that researchers might test.

*This report you are presently reading

CROSS-AGE TUTORING

"Coordinator's" Questionnaire

Under a contract with the National Institute of Education, we are examining cross-age tutorial projects. We are trying to identify the problems and strengths of such programs so that recommendations can be made as to how these programs can best be supported. Your responses to the following questions will aid us greatly in making realistic recommendations.

Cross-Age Tutoring Project
146 Moore Hall, UCLA
Los Angeles, CA 90024

TERMINOLOGY: Tutor--*a pupil who teaches another pupil*

Tutee--*the pupil who is taught by the tutor*

Sending teachers (or schools)--*the teachers (or schools) from whose classrooms the tutors were drawn*

Receiving teachers (or schools)--*the teachers (or schools) from whose classrooms the tutees were drawn*

(25) *small numbers are for keypunching--please ignore*

Description

1. If you are not the person named on the cover sheet, please record your:

name _____ position _____ phone no. _____

What was the name of the tutoring project to which you will refer in this questionnaire?

_____

Was the project modeled after another project (e.g., Youth Tutoring Youth) or based on the work or materials of a particular person or persons?

(19) ☐ yes ☐ ? ☐ no If "yes," please specify: _____

NOTE: *If you are familiar with several tutoring projects, please check here* (20) ☐ *and choose one project to report on in this questionnaire, preferably a project which involved secondary school tutors.*

2. When was the project started? _____ (21-24)
month year

(25) Is it still running? ☐ yes ☐ ? ☐ no If "no," when did it end? _____ (26-29)
month year

NOTE: *If the project changed substantially during its operation, please check here* ☐ (30) *and describe it, in this questionnaire, as it was when it involved the largest number of students.*

3. What mainly caused the cross-age tutoring project to be initiated?

(31) ☐ 1 request from receiving school for tutors ☐ 2 request from sending school

☐ 9 other (please specify) _____

_____

4. Was the project started mainly because of one person's idea? ☐ yes ☐ ? ☐ no (34)

If "yes," what was the position of that person?

(35) ☐ 1 teacher ☐ 2 counselor ☐ 3 administrator ☐ 4 other _____

5. How many schools were involved in the project and what was the general size of these schools?

-number of elementary schools _____ (36-38) approximate enrollment per school _____ (39-42)

-number of junior high or middle schools _____ (43) approximate enrollment per school _____ (46-49)

-number of high schools _____ (50) approximate enrollment per school _____ (53-56)

6. Please check any of the following descriptors which applied to the school(s) involved.

(57) ☐ Title I
(58) ☐ predominantly minority
(59) ☐ serving a poverty area
(60) ☐ predominantly affluent

(61) ☐ suburban
(62) ☐ urban
(63) ☐ rural

(64) ☐ public
(65) ☐ private

[1]

Tutors and Tutees

For items 7 - 15, please answer each question for tutors (in column 1) and then for tutees (in column 2).

		Tutors Column 1	Tutees Column 2
7.	Grade level(s)?	(20-32) _____	_____ (33-45)
8.	About how many students participated at any one time?	(46-49) _____	_____ (50-53)
9.	Approximately what percentage of the students were:		
	-Black?	(54-55) _____	_____ (56-57)
	-Spanish surname?	(58) _____	_____ (60)
	-White?	(62) _____	_____ (64)
	-Oriental?	(66) _____	_____ (68)
	-Other?	(70) _____	_____ (72)
			[2]
10.	Approximate percentage of students who were female?	(16-17) _____	_____ (18-19)
11.	For how many weeks did students generally participate in the project?	_____ (20)	_____ (22)
12.	On how many days per week were tutoring sessions usually held?	_____ (24)	_____ (25)
13.	On days when there was tutoring, about how many minutes per day was a student usually involved in tutoring?	_____ (26)	_____ (29)
14.	How were students selected to participate (check all that apply):		
	-volunteers	☐ (32)	☐ (41)
	-enrolled in an <u>elective</u> course for tutoring	☐ (33)	☐ (42)
	-enrolled in a <u>non-elective</u> course which involved tutoring	☐ (34)	☐ (43)
	-selected by teachers	☐ (35)	☐ (44)
	-selected because of high achievement	☐ (36)	☐ (45)
	-selected because of low achievement	☐ (37)	☐ (46)
	-selected because of leadership qualities	☐ (38)	☐ (47)
	-selected because of weak self-confidence	☐ (39)	☐ (48)
	-other (please specify)_____	☐ (40)	☐ (49)

		entire class	entire class
15.	Was tutoring scheduled for an entire class at a time or were students pulled from a class to participate in tutoring sessions?	1 ☐	☐
		pulled out 2 ☐ (50)	pulled out ☐ (51) [3]

Running the project

16. If tutoring was an elective course, how popular was it? (Please check one box.)

(78) ☐ 1 The most popular elective ☐ 2 More popular than most ☐ 3 Average ☐ 4 Less popular than most ☐ 5 The least popular elective ☐ 6 Tutoring was not an elective

17. (79) Were tutors trained <u>prior to</u> tutoring? 1 ☐ yes 2 ☐ no If "yes:"

(80) a. Who conducted this preliminary training?_____

(81) b. Roughly how many hours were devoted to this training?_____

c. Roughly how much time in this preliminary training was devoted to each of the following areas (circle one answer for each line)?

	1 no time	2 a little	3 some	4 a lot	5 most of the time
(24)-subject matter content (e.g., if students were to teach fractions, they were taught fractions during their training session)	1	2	3	4	5
(25)-methods of teaching the subject matter (e.g., how to teach fractions)	1	2	3	4	5
(26)-social skills (e.g., smiling, calling pupils by first name, showing concern)	1	2	3	4	5
(27)-methods of motivating tutee (e.g., gaining interest, maintaining cooperation)	1	2	3	4	5
(28)-use of curriculum materials specially made for tutoring	1	2	3	4	5
(29)-other (please specify)_____	1	2	3	4	5

(30)-Do you have any comments on the preliminary training?_____

_____

18. (31) Did tutors receive further training during the project? ☐ yes ☐ ? ☐ no If "yes "

(32) a. Who conducted this "inservice" training?_____

(33-34) b. About how many hours per week was this "inservice" training given?_____

(35) c. Did the inservice training differ in content from the preliminary training described in question 17? ☐ yes ☐ ? ☐ no If "yes," please state how:

(36) _____

_____

19. (37) Did tutors hold any regular meetings as a group without teachers? ☐ yes ☐ ? ☐ no

20. (38) When were tutoring sessions generally held? (Check all that apply.)

1☐ before school
2☐ after school
3☐ weekends
4☐ during morning school
5☐ during afternoon school

21. (39) Where did the tutoring usually take place?

1☐ in receiving teacher's classroom
2☐ various places at receiving school (e.g., library, halls, outdoors, cafeteria)
3☐ in a room specially prepared for tutoring
4☐ other (please specify)_____

22. (40) Who usually supervised the tutoring sessions?

1☐ no one directly
2☐ receiving teacher
3☐ sending teacher
4☐ coordinator
5☐ other (please describe)_____

23. (41) If an adult closely supervised the tutoring session, please describe what this adult usually did during each session (e.g., showed a tutor how to explain something):

_____

_____

24. (42) How were tutees assigned to tutors?

1☐ free choice by students
2☐ teacher or coordinator assigned on basis of informal judgement of compatibility
3☐ teacher or coordinator paired tutors and tutees on the basis of the following data:

_____

4☐ other (please describe)_____

25. For how many weeks did a tutee generally remain with the same tutor? ☐☐ weeks (43-44)

26. (45) Was tutoring usually conducted on a one-to-one basis? ☐ yes ☐ ? ☐ no

If "no," how many tutees did a tutor work with at one time?_____ (46-47)

27. (48) In which subject matter area(s) were tutors to teach?

1☐ reading and math
2☐ reading only
3☐ math only
4☐ other_____

[illegible] What tutors usually selected? (Please check one box for the most usual procedure.)

1 ☐ chosen by the tutor with few restrictions

2 ☐ chosen by the tutor within the following limits: _____

_____

3 ☐ prescribed by the sending teacher or coordinator

4 ☐ prescribed by the receiving teacher

5 ☐ dictated by the tutoring materials used

6 ☐ other _____

29. (51) How did tutors usually decide exactly what to do during each tutoring lesson?

1 ☐ activities chosen by tutor with few restrictions

2 ☐ activities chosen by tutor within the following limits: _____

_____

3 ☐ activities prescribed by sending teacher or coordinator

4 ☐ activities prescribed by receiving teacher

7 ☐ activities were those required by the tutoring materials used

8 ☐ other _____

30. (52) What were the tutors usually called?

1 ☐ tutors 2 ☐ junior teachers 3 ☐ helpers 4 ☐ aides 5 ☐ teachers 6 ☐ olders

7 ☐ other (please name) _____

31. Did tutors receive:

-payment? ☐ yes ☐ ? ☐ no (53)

(If "yes," how much per hour? _____ (54-55) source of funds? _____) (56)

-course credit? ☐ yes ☐ ? ☐ no (57)

(If "yes," how much? _____) (58)

-privileges? ☐ yes ☐ ? ☐ no (59)

(If "yes," describe _____ _____) (60)

-grades (for report cards)? ☐ yes ☐ ? ☐ no (61)

-preferred status? ☐ yes ☐ ? ☐ no (62)

(If "yes," describe _____) (63)

32. What consequences resulted for tutors who did not show up for tutoring sessions?
(64-65) _____ _____

33. What consequences resulted for tutees who did not cooperate during tutoring sessions?
(66-67) _____ [4]

34. Were any tutors dropped from the project because of lack of responsible behavior:

-during tutoring? ☐ yes ☐ ? ☐ no ( ) If "yes," how many? _____ (20-22)

-elsewhere? ☐ yes ☐ ? ☐ no ( ) If "yes," how many? _____ (23-25)

35. In cases of lack of responsible behavior, were some tutors given other assignments rather than being dropped from the project? (describe)

_____ (26-28)

36. Were any tutees dropped from the project because of lack of cooperation with tutors?

(29) ☐ yes ☐ ? ☐ no If "yes," how many? _____ (30-32)

37. Did tutors handle some tutee discipline problems themselves?

(33) ☐ yes ☐ ? ☐ no If "yes," how? _____ (34-35)

38. Did some tutors have responsibility for training new tutors?

(36) ☐ yes ☐ ? ☐ no If "yes," how did this work out? _____ (37-38)

39. (39) Did tutors communicate with parents of tutees?

1 ☐ no 2 ☐ a few did 3 ☐ almost all did at least once

4 ☐ yes, all communicated regularly 5 ☐ ?

40. Were the more experienced tutors given more difficult assignments or extra duties?

(40) 1☐ yes, regularly 2☐ yes, sometimes 3☐ ? 4☐ No

If "yes," please give examples _____ (41)

41. (42) Did some tutors supervise other tutors? ☐ yes ☐ ? ☐ no

42. Did tutors have some responsibility for tutees outside the classroom?

(43) ☐ yes ☐ ? ☐ no If "yes," please give examples and estimate frequency and duration _____ (44-47)

43. Did the tutoring project change significantly in any way as time went on:

-in the responsibility given tutors? (48) ☐ yes ☐ ? ☐ no

(If "yes," describe _____) (49)

-in the inservice training? (50) ☐ yes ☐ ? ☐ no

(If "yes," describe _____) (51)

-in the response of tutors or tutees or teachers? (52) ☐ yes ☐ ? ☐ no

(If "yes," describe _____) (53)

[5]

Staff and Resources

44. Were any of the following kinds of additional staff assigned to the project? If yes, please fill in the boxes.

a. paraprofessionals employed to assist? (20) yes/no — (21-23) number FTE* — $ (24-28) approximate annual salary rate (for 100% time)

b. certificated teachers or counselors employed in addition to regular teachers to coordinate or supervise the tutoring project? (29) yes/no — (30-32) number FTE — $ (33-37) approximate annual salary rate (for 100% time)

c. temporary professional help to start the project (e.g., consultants, inservice personnel)? (38) yes/no — (39-41) number — $ (42-46) approximate cost per day, each

d. substitute teachers to relieve sending or receiving teachers? (47) yes/no — (48-50) total no. of substitute days — $ (51-55) substitute's remuneration per day

e. Other staff? (56) yes/no positions (57-58) — $ (59-63) estimated total cost per year

45. Were teachers given release time in connection with the tutoring project?

(64) ☐ yes ☐ ? ☐ no If "yes," how much time? _____ (65-66) how frequently? _____ (67-68)

46. Please estimate the cost of additional (above normal) instructional supplies that were needed for the tutoring project. $_____ (69-73) [6]

47. If students were transported by bus, please estimate:

number of buses used ☐ (20-23) seating capacity of bus ☐ (24-25)

average number of miles traveled by each bus each day there was tutoring ☐ (26-28)

*FTE = Full Time Equivalent. Examples: One person for one day a week is "1/5 FTE" because that person works 1/5 of full time. Two people each working half time would be equivalent to one full time and therefore would be "1 FTE."

48. If you were to run another tutoring project in the same school(s), how important would you expect the following to be?

		1 Not needed	2 Not sure if needed	3 Desirable	4 Important	5 Essential	
resources							
-money to pay tutors	(29)	1	2	3	4	5	
-money to purchase supplies	(30)	1	2	3	4	5	
-purchased curriculum materials	(31)	1	2	3	4	5	
-school-made curriculum materials	(32)	1	2	3	4	5	
-progress tests for tutees (excluding pre and posttests)	(33)	1	2	3	4	5	
-transportation	(34)	1	2	3	4	5	
-media, a.v. equipment, etc.	(35)	1	2	3	4	5	
-other resources _____	(36)	1	2	3	4	5	
(37)							
staff							
-aides (paraprofessional adults)	(38)	1	2	3	4	5	
-consultants	(39)	1	2	3	4	5	
-extra professional staff (supervisor, coordinator, project director)	(40)	1	2	3	4	5	
-release time for teachers for planning	(41)	1	2	3	4	5	
-other personnel _____	(42)	1	2	3	4	5	[7]
(43)							

Possible Problems

49. To what extent were the following problems encountered in your project?

Objections	1 This was definitely not a problem	2 I do not think this was a problem	3 ? uncertain	4 I think this was a problem	5 This was definitely a problem	
-parental objection to the project	1	2	3	4	5	(20)
-some objections from teachers at receiving school	1	2	3	4	5	
-some objections from teachers at sending school	1	2	3	4	5	
-not enough teachers who wanted to participate	1	2	3	4	5	
-legal constraints (e.g., course credits, supervision problems, credential problems)	1	2	3	4	5	
Resources						
-tutoring project personnel were overworked	1	2	3	4	5	(25)
-not enough time to train tutors	1	2	3	4	5	
-shortage of space or facilities	1	2	3	4	5	
-more demand for tutoring than we could accommodate	1	2	3	4	5	
-shortage of transportation for tutors	1	2	3	4	5	
-scheduling problems (trying to match tutor hours to tutee hours)	1	2	3	4	5	
-not enough administrative assistance	1	2	3	4	5	
-insufficient appropriate curriculum materials	1	2	3	4	5	

Student Attitudes	1 This was definitely not a problem	2 I do not think this was a problem	3 ? uncertain	4 I think this was a problem	5 This was definitely a problem	
-not enough tutors who wanted to participate	1	2	3	4	5	(33)
-some tutors lost interest in teaching	1	2	3	4	5	
-some tutors caused problems at the receiving school	1	2	3	4	5	
-some tutees became uncooperative	1	2	3	4	5	
-not enough tutees who wanted to participate	1	2	3	4	5	
Procedures						
-some receiving teachers not using tutors wisely	1	2	3	4	5	(38)
-excessive noise associated with tutoring	1	2	3	4	5	

-other problems? (Please specify as many as you can think of; we need to know all the possible problems.) (40-50)

_____

_____

_____

_____

_____ [8]

Evaluation

50. (20) Is there any kind of report of this project available? ☐ yes ☐ ? ☐ no

(21) If "yes," can you send us a copy? ☐ yes ☐ no

If "no," please indicate here from whom we can request a copy:

(22) name _____ address _____

51. What were the main goals of the tutoring project?

(25-32) _____

_____

_____

NOTE: *The next three questions concern formal evaluation of the project. If there was no formal evaluation, check here* ☐ (33) *and skip to question 55.*

52. What kinds of data, if any, were collected concerning tutors and tutees? (Please check any that were collected.)

	Tutors	Tutees
-measures of social goals such as caring and helping, mutual support, understanding of others, responsibility	☐(34)	☐(40)
-self-attitude measures (e.g., self-concept, self-confidence, aspirations)	☐(35)	☐(41)
-attitude-to-tutoring measures (e.g., questionnaires about the project)	☐(36)	☐(42)
-standardized achievement tests	☐(37)	☐(43)
-other achievement tests	☐(38)	☐(44)
-attendance	☐(39)	☐(45)

53. (41) Were any measures collected as pretests and then posttests? ☐ yes ☐ ? ☐ no

If "yes," which? _____ (47-68)

54. (42) Were data collected from control groups? ☐ yes ☐ ? ☐ no If "yes,"

(43) a. How were control groups formed? _____

(44-46) b. Which measures were collected? _____ [9]

55. a. What was your own evaluation of the project you have described?

(29) 1☐ very poor 2☐ poor 3☐ OK 4☐ good 5☐ very good 6☐ excellent

(30-34) b. Please describe an incident which you recall from the project that illustrates why you make this evaluation.

_____

_____

_____

56. As regards tutoring in general (not the particular project you have described):

(24-26) a. What do you see as the main benefit of cross-age tutoring?

_____

_____

_____

(27-29) b. What is the main problem likely to be encountered?

_____

_____

_____

(30-32) c. How should a project be run to make it successful?

_____

_____

_____

Thank you very much indeed for your time and effort on this questionnaire. A summary of results will be mailed to you if you wish to receive one. Please return the questionnaire to the person who gave it to you or directly to the UCLA address on the front cover. Thank you.

School Personnel Give Advice

Questionnaire respondents were asked "How should a project be run to make it successful?" Below we let the answers speak for themselves. They have been classified according to the type of project the respondent had observed and have been organized into roughly three kinds of advice: concerning staff, structure, and "human relations" or the ambience or values associated with the project.

Secondary to Elementary School Teacher Aide Projects (1)

Staff

- Give a dedicated teacher sufficient time and materials, assist him/her with any scheduling problems, and give administrative support to the project.
- High school director should work more closely with receiving teachers.

Structure: Organization, planning and evaluation

- Good communication.
- With training and evaluation.
- Very structured with specific short term goals.
- Careful, detailed planning
- It must be well organized and it must change constantly to meet district needs.
- Formal classroom type course. You can't just take (study hall) kids and have them cross/tutor.

Human Relations

- Good communication between supervising teachers and tutors.
- Do not select tutors who have long records of absenteeism or tardyism. Tutors must desire to want to tutor. Intellectual level is of small import.

- Teachers and administrators must accept the tutors as mature people and give them the respect they would give any other adult aide working in the school. Treat the problems one at a time as they arise and not generalize the problems. Let each receiving teacher work out a classroom organization of aide use that best fits their needs, personalities and way of doing things; and then count your blessings because a good cross-age tutoring program has much to offer the kids in your school.
- Inclusion of classroom teachers and school administrators in all stages of planning.
- Be flexible--be encouraging to tutors.
- Open lines of communication must be maintained.
- Lots of communication between sponsors, student interns, tutees, and intern coordinator.
- Honestly, openly, and with a spirit of adventure, not demand!

Secondary to Elementary School Tutorial Service Projects (2a)

Staff

- More time is needed to work with tutors on an ongoing basis.
- Have a person run the project. Train tutors for specific behaviors.
- With a responsible director in charge, sufficient previous training and reinforcement.
- Select a coordinator. Teachers be assigned to project. Need for aides to help train and supervise.
- A full time program needs full time direction and organization.
- In-services for receiving teachers.
- An interested coordinator--willing to do extra hours of P.R. in the community to sell programs.

Structure: Organization, planning and evaluation

- Tutors need to be trained separately and before their assignment to tutees.
- With definite guidelines.
- Pre and post testing and evaluation of both tutors and tutees.
- Tutoring formats should be structured and well defined to give the participants security as well as successful experiences.
- Within a structured format as opposed to a "do-your-own-thing" format.
- Close supervision, adequate preparation, continued help and reinforcement.

- A project should be pre-organized and constantly re-organized and re-evaluated re personnel and needs involved.
- Highly structured; clear guidelines; full understanding of program's objectives by all involved; highly visible.

Human Relations

- People in charge should be in daily contact with tutors and tutees.
- Design from ground-up, with input from people involved. NOT imposed by higher authorities.
- It has to be very flexible and it has to be run by teachers who believe in tutoring and that it works.
- Tutoring projects should only be attempted in schools that have positive and successful administrative leadership.
- Only in schools that have strong, positive and successful administrative leadership.
- Very close working relationship between the sending teacher, tutors and receiving teacher.

Within Elementary School Tutorial Service Projects (2b)

Staff

- Staff have clear and reasonable goals in mind.
- There should be competent persons in charge.
- Good supervision.
- Thorough orientation and training is important as well as 100% teacher interest and cooperation. Of course, the full support of the district and building administration.
- Possibly within the contained classrooms or with increased adult supervision.
- In-service for teachers.

Structure: Organization, planning and evaluation

- Well-organized, planned ahead.
- It should be highly structured. There should be frequent evaluation and planning sessions.
- Short-term assignments of tutors and tutees for specific attainable short-range objectives.

- Goals and procedures should be very clearly defined for both tutors and tutees.
- There should be initial training, follow-up in-service, evaluation, and changes should be made (if necessary) in terms of goals, procedures, etc., according to the evaluation.
- Well organized.
- Teacher information, tutor training and pretesting, tutor-tutee matches, continual guidance of tutors. Evaluation.
- Well planned.
- Plan.
- With lots of planning time, direction, and tolerance.
- Plenty of team/school cooperative planning.

Human Relations

- Must have staff commitment to the project--teachers must be cooperative and value tutoring project.
- Needs good teacher cooperation. Give tutor some creative leeway.
- It should be a volunteer approach with much praise and recognition for effort on both the tutor and tutee levels.
- Would vary in terms of unique school situations. One important aspect, however, is the voluntary and willing basis for tutor and tutee.
- Much cooperation from receiving teachers. Cope with any problem quickly, always encourage tutors and tutees concerning their abilities.
- Complete cooperation between sending teacher and receiving teacher. Also other activities eliminated.
- With lots of planning time, direction, and tolerance.

Learning-by-Tutoring Projects (3)

Staff

- Ongoing supervision a must; close articulation with classroom teachers; time in schedule for planning assignments.
- There must be funds for a supervisor who can be specifically in charge.

Structure: Organization, planning and evaluation

- 1) Tutor and tutee time must be arranged into master schedule; 2) tutors must be well trained and supervised throughout the year; 3) Tutors must continue to receive aid in lesson planning weekly so they don't wear thin on ideas.
- A well structured plan such as ours works very well 1) back to back tutor/tutee classes, 2) intensively trained tutors.

Human Relations

- Trial and error. Let the tutors make mistakes and then help them out. Be receptive to all suggestions.
- Personal level--between specific teacher and principal of elementary school.
- Tutors must be indoctrinated ahead of time that they are the lucky ones to have tutors--no one should be singled out for tutoring or it becomes negative. That's why having tutors working with a whole class is good--everyone receives a tutor.
- It needs strong support from all levels of administration and must have teachers assigned or recruited to work in the program as needed to meet the demand for it by students.

> It is possible that the relative effectiveness of the two types of tutoring has a simple explanation. Harris and Serwer (1966a, b) found that of many variables operating in the classroom, the amount of time that the teacher devoted to reading activities was among those most highly correlated with reading achievement, while the correlations for amount of time spent in supportive activities were slightly negative, but not significant. Thus, since Programmed tutoring is entirely devoted to reading activities, the difference in their effectiveness may simply reflect the extent to which the two techniques supplement the classroom with additional time devoted to the teaching of reading. (p. 342)

This seems a reasonable explanation, given the development methods that produced the Programmed tutoring procedures. *The concern which must be expressed is that the results concerning Directed tutoring not be over-interpreted to the point of stating that tutees do not learn unless tutors follow high structured, externally imposed procedures. Such a conclusion was not established by the Ellson, Harris and Barber study.* The lack of significant effect for one session of Programmed tutoring lends support to doubts concerning the sensitivity of standardized reading tests: surely an extra 15 minutes per day of reading instruction with effective materials should produce results.

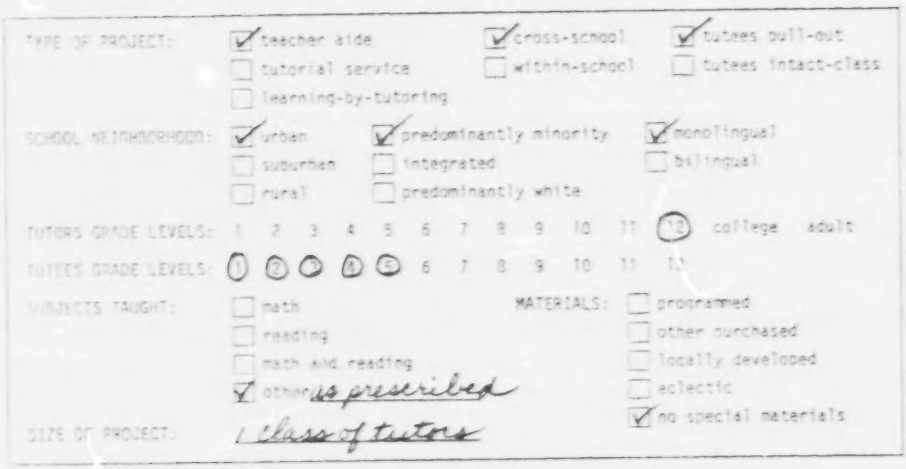
Finally it should be reiterated that the issue of "Programmed" versus "Directed" tutoring should be resolved solely on the basis of the outcomes for tutees, since benefits for <u>tutors</u> are also frequently a goal of tutoring projects.

Reports of Visits to 14 Sites

In this appendix there are descriptions of visits to existing cross-age tutoring projects. These descriptions are based on field notes that were made immediately following each visit, field notes originally meant only to be an aid to memory. In retrospect, it seemed that these visits were such a valuable experience that readers might find the accounts interesting. Projects that are actually in operation have something very important going for them: they have been found feasible at least once!

The only changes made in the notes, which were often dictated onto tape rather than written, have been those made to provide anonymity or increase clarity. Anonymity might not be necessary as most schools are justly proud of their tutoring projects, but we felt that the use of real names was inappropriate and, were our report to do injustice to any project, better that the project not be named. We were particularly interested in problems as they could provide warnings to be heeded in the design of future projects. We hope that reports of problems are not viewed as criticisms but rather as a contribution to our project's understanding of tutoring. Inevitably, a single visit represents a small sample of a project and is in no way an adequate basis for assessment.

SITE #1



Tutoring at this high school was implemented in response to a request from the elementary school. The counselor's involvement in the program is in the screening and selection process for tutors. She examines their cumulative records, looking for fairly good grades and some academic skills and particularly for good attendance records and good cooperation. However, she mentioned that she was asked on an experimental basis to enroll a returning camp student (a student who had been sent to a juvenile detention camp) as a tutor. She was planning to watch his performance very carefully since he had requested tutoring and had always received good grades and good cooperation in physical education. She was hoping he could be used in the physical education program at the elementary school and was very interested to see if this experiment worked out.

The scheduling problem that high schools frequently face was dealt with in the following way: Students were excused 7 minutes early from their first period class; a bus was provided to take them to the nearby elementary school. Upon their return at the end of the second period, they arrive at the secondary school in the middle of the nutrition break and were therefore not late for their third period class. The arrangement is that the elementary school teachers give grades for the tutors, and tutoring counts as a class providing credit towards graduation. It can be taken in place of a social studies elective in the twelfth grade.

Asked what would be the needs for a larger tutoring program, the counselor said that credits are definitely needed for students. They need to see personal benefits and rewarding experiences from the tutoring; and of course transportation is necessary because even a block is too far to walk. Some years ago they had federal funds, and teachers were paid to tutor after school. Some students were also paid to tutor other students after school. The counselor was receptive to the idea that perhaps students who were starting to stay out of school 1 or 2 days a week and were receiving poor cooperation grades might benefit from being tutors; and she repeated her intention of watching the one student who was returning from camp to see how he worked out as a tutor.

Following the visit to the high school, we went to the elementary school to which the tutors are transported. When the 20 or 25 tutors arrive at the elementary school, they spread out one per classroom. On arrival at the elementary school classroom, the usual procedure is that the elementary school teacher will give written or verbal instructions as to who the tutor should work with and what pages of a book or what activities to use. In other words, this is very much a teacher aide program more than a tutoring program. The tutors that we saw were all working with two, three, four, or five students; that is, they were engaged in small group work rather than one-to-one tutoring.

Asked what made them volunteer for tutoring, several of the twelfth grade high school students mentioned having been tutored themselves in the sixth grade. The usual first comment when asked why they had volunteered for tutoring was something like, "I like children," or "I like to help children." One of the young ladies had been employed as a tutor during the summer earning $2.10 an hour, working 5 hours a day. The tutors were mainly working on reading. In one classroom the teacher explained that the tutor was working with the five worst students in mathematics. The tutees were working problems from a sheet. One tutee, for example, had a chalk board in front of him. To work the problem, "8 - 5," the tutor told him to draw 8 lines, which he did--one after another like a picket fence. "Now rub out 5 of them." The tutee then erased 5 of the lines, counted what was left, and put down the answer 3. They went through this procedure a few times. It was worrying that the tutor never mentioned explicitly why the child was writing the 8 lines. No connection

was mentioned between drawing the first 8 lines and the number which was part of the subtraction problem. When the tutor moved around the table to another pair of students nearby to help them, the tutee looked at the next problem and drew 8 lines, although the problem was "10 - 5." He took 5 lines away, and got the answer 3 for the problem. It could be that the observer was disconcerting to him, but it seemed that if the tutor had been fully responsible for the one child, she would have taught more carefully and would have observed more carefully that he was not achieving the objective. By moving from child to child, she was doing a somewhat superficial job of teaching, and it seemed unlikely that the five worst students in the class were going to benefit significantly from the half hour a day that she was dividing up among the five of them.

Asked what they planned to do during the semester of tutoring, tutors generally looked a little doubtful and more or less said, "Just like I'm doing now," and indeed their assignments were fairly well mapped out each day by the receiving teacher. They seemed to be enjoying the work. When asked what grade they would receive as tutors, some said they didn't know. Others said it would depend on how well the tutees learned, and whether or not they were in class or hanging around in the halls and not doing their job.

The counselor had said that about 20% of the tutors sign up for a second semester of tutoring. When the time allotted to tutoring was up, we made a courtesy call on the principal. Most people merely politely say, "How nice," when we say we're studying cross-age tutoring. This principal took an aggressive approach, and there followed a very lively and interesting conversation about the practicality of tutoring projects. The principal had had experience with a tutoring program in the summer in which there were funds to hire tutors. He objected strongly to the fact that when tutors were making absolutely no progress and were not behaving responsibly, his dismissing them elicited all kinds of complaints and static from the central office who just wanted the project to look good on paper. He ended up, however, in complete agreement that secondary school students could teach many of the basic skills in an elementary school, and that the Learning-Tutoring Cycle is a viable idea.

SITE #2

TYPE OF PROJECT: ☑ teacher aide ☑ cross-school ☑ tutees pull-out
☐ tutorial service ☐ within-school ☐ tutees intact-class
☐ learning-by-tutoring

SCHOOL NEIGHBORHOOD: ☑ urban ☑ predominantly minority ☑ monolingual
☐ suburban ☐ integrated ☐ bilingual
☐ rural ☐ predominantly white

TUTORS GRADE LEVELS: 1 2 3 4 5 6 7 8 9 (10) 11 12 college adult

TUTEES GRADE LEVELS: (1) (2) (3) (4) (5) (6) 7 8 9 10 11 12

SUBJECTS TAUGHT: ☐ math ☐ reading ☐ math and reading ☑ other as prescribed

MATERIALS: ☐ programmed ☐ other purchased ☐ locally developed ☐ eclectic ☑ no special materials

SIZE OF PROJECT: 2 classes of tutors

We boarded a bus taking two 10th grade English classes and their teachers to elementary schools. The teachers took roll on the bus. One class got out at the first elementary school, and the second class continued on to a second elementary school.

Alighting from the bus, students spread out to their various classrooms without further instructions. The supervising teacher then conducted me from class to class to observe how the students were operating as tutors. Very few of the students we saw were teaching on a one-to-one basis. Some were sitting in a group, rapidly stapling papers together. Others were pasting lists of students onto sheets of paper, preparing roll sheets for the teachers. Some were working at a table with groups of children.

I asked some of the young men who were stapling papers or pasting lists of students together if they had done some one-to-one tutoring or teaching, and if so, whether they preferred working in this math lab preparing materials or doing the one-to-one teaching. Those that had a preference tended to prefer the work in the math lab. It was clearly a social, relaxed atmosphere, and they had some kind of competition going as to who could staple the papers together most quickly. The supervising teacher remarked that she put students in the math lab if they demonstrated attendance problems, because otherwise their tutees would be disappointed if the tutors only came to school intermittently.

Asking some of the students who were working on a one-to-one basis about how they were enjoying the tutoring and whether they thought they were learning produced some non-commital answers and some enthusiasm. One female student was obviously very proud of herself, reporting that not many students asked to work with EMR (educable mentally retarded) students, but that she found they could do just fine, and they were doing good work. She and another student came everyday to the EMR room, graded papers, or did some teaching. She said she liked to help people.

The teacher in the same room said that she couldn't do without the student helpers. "Sometimes," she said, "a child will be very upset and disturbed and it will take 30 minutes of talking to the child to calm him down. The students have time to do that, and then the child is ready to have a good day at school."

In another classroom, a teacher, when asked about the tutoring, said, "I want to tell you, I have seen remarkable development in the tutors and an enormous response from the children. Their academic work has improved. Tutors have wanted to become teachers after having previously been totally turned off school. It's been just wonderful. Last year, Robert worked with a Spanish speaking child who could barely read. The child ended up reading very well, and I gave all the credit to Robert. Both students were very shy. They helped each other enormously. I had one student who could sit in front of a group of little children and enthrall them with a story that he made up himself, and he could take them out on the playground, play games with them. This student felt so good about himself, clearly enjoyed what he was doing, and he was a tremendous help."

One tutor, when asked what he had learned from the tutoring, said that he had discovered that he didn't want to be a teacher. He had originally thought he did, and the tutoring had led him to change his mind. Nevertheless, he liked doing the tutoring, especially as he was hoping to get a job tutoring in the summer.

The supervising teacher remarked that she tried to match the tutors with the receiving teachers. Some receiving teachers enjoyed aggressive, extroverted

tutors who asserted themselves. Others preferred the quiet, working-behind-the-scenes kind of tutor to assist them in their rooms.

Tutors are instructed by the receiving teacher to communicate only positive things to the parents of the tutees or other persons in the community. They are specifically urged not to carry stories home of poor behavior or any such negative comments.

Rewards available to the tutors

Students who have been tutors during the regular year get class credit for 10th grade English for the semester in which they are tutors, and a few sign up for a second semester and also receive class credit for that. Thus tutoring replaces an English class. Furthermore, students who are being tutors during the regular year get first choice of jobs offered under the neighborhood Youth Corps or CETA programs in the summer. If they are eligible, meaning if their parents are sufficiently poor, they can be hired as educational aides, during the summer, getting five credits and $2 per hour. In addition to neighborhood Youth Corps and CETA funds, there are also regional occupational programs and regional occupation center funds available.

Reported impact on tutors

After visiting the elementary school, we talked with a small group of teachers about the benefits of tutoring. These teachers noted that:

- Some of the best tutors turned out to be members of the Crypps gang (one of the most notorious gangs in L.A.).
- Some students were found to have perfect attendance records for their English class (tutoring) and to have zero attendance records for the rest of their classes. It appeared that they were coming to school only for that period for which they tutored.
- One student was reported to be sick at home and having a home teacher b t would nevertheless report to the elementary school to do his own tutoring.
- Many students have gone back to their own elementary school, and in some cases when elementary teachers have been unwilling to have tutors, they have been willing to accept one of their own former students.

Regarding benefits to the tutees, the supervising teacher pointed out that a child who had started to hang around gang members after school was brought into the tutoring program and assigned an older male student as a tutor in the hope of diverting him from this identification with older male students who were gang members.

The tutoring program, although strongly supported by those faculty who are participating in it, is coming under considerable fire from the remaining members of the English faculty at the high school. They claim that the students are not receiving proper instruction in grammar and are missing out on their necessary English classes. The faculty were receptive to the idea that tutors would benefit if they were truly teaching at a level which challenged them and were teaching on a one-to-one basis and following the progress of their tutees, taking responsibility for the learning of their tutees. The faculty agreed among themselves that there was a need to tighten up the program to be sure the students were not spending their English time stapling together papers and were somewhat interested in the idea of running an experiment to show that those who were tutoring were making better gains than students who were staying in regular classes.

SITE #3

TYPE OF PROJECT: ☑ teacher aide ☐ tutorial service ☐ learning-by-tutoring ☐ cross-school ☑ within-school ☑ tutees pull-out ☑ tutees intact-class

SCHOOL NEIGHBORHOOD: ☐ urban ☐ suburban ☑ rural ☐ predominantly minority ☐ integrated ☑ predominantly white ☑ monolingual ☐ bilingual

TUTORS GRADE LEVELS: 1 2 3 (4) (5) (6) 7 8 9 10 11 12 college adult

TUTEES GRADE LEVELS: (1) (2) (3) 4 5 6 7 8 9 10 11 12

SUBJECTS TAUGHT: ☐ math ☐ reading ☑ math and reading ☐ other _____

MATERIALS: ☐ programmed ☐ other purchased ☐ locally developed ☑ eclectic ☐ no special materials

SIZE OF PROJECT: about half the school

This elementary school is located in an agricultural community that is rapidly growing and taking on the characteristics of a suburban bedroom community. The school was the "top" elementary school in the district as measured by achievement test data. We were shown around the school by an ECE coordinator.

The school has four methods of education which distinguish it from a normal school. These are:

- Continuous progress assessment
- Year-round school
- Early Childhood Education (ECE)
- Cross-age teaching (C.A.T.)

Continuous progress assessment was started in the school about 3 years ago at the urging of an upper grade teacher. The school instituted a sequential skills program in reading. Each teacher was assigned certain levels to teach for 50 minutes per day, and all the children in the school were tested and sent to work at their appropriate level of reading. It was basically a phonics program. They also have a continuous progress assessment math program. In the staff room we saw spread out on one side of the wall their mathematics tests. They have some 72 levels of basic arithmetic.

When the school accepted Early Childhood Education funds, the continuous progress assessment fitted in well with the demands of ECE programs that teachers be accountable and that they individualize and assess each child's needs and meet those needs. The ECE program brings approximately $50,000 p.a. to the school. In the school district, the "worst" elementary school was the first one to receive Early Childhood Education funds and then the "top" school. Next year the "next-to-the-worst" elementary school will have an opportunity to accept ECE funds. We were told that some school faculties turned down the $50,000 because they did not wish to submit to the demands of ECE--demands that there be aides in every classroom and parent volunteers regularly in the classroom, and an extensive 2-day audit by state department ECE officials who question a school's practices extensively. They wish to know how the children's needs have been assessed, how each child's needs have been met, if Johnny is at level 42, what is the evidence that makes the teachers declare that Johnny is at

level 42, and does Johnny know he's at level 42, and does Johnny know what he has to study next, etc., etc. One can see that a defensive faculty might not like this exposure of the school to parents, community people, auditors, etc.

For a year-round school there are five attendance schedules called "streams." The fifth stream is the traditional one, the summer-vacation attendance pattern. In the other streams, students attend school for 9 weeks and vacation for 3 weeks in cycles throughout the year. Sometimes the 3-week vacations are followed or preceded by a break, for Christmas or spring vacation, for example. The 3-week breaks in school attendance are called inter-sessions. Although students are not required to come to school, many do attend school during the inter-session, and the school receives ADA for each student that attends. Teachers can work during the inter-session as substitutes, which means they have a chance to earn above their normal yearly salary. The inter-sessions provide a chance for cross-age tutoring. Secondary school students can sign up to attend inter-session at the elementary school and spend their whole day tutoring.

About 4 years ago, the school tried compulsory total school tutoring. All teachers participated, classrooms were formed into pairs, upper grade to lower grade. This program lasted barely a year and was not well received. The coordinator identified the following problems with this compulsory, total school tutoring:

- Tutoring three times a week was too much.
- The tutors got bored.
- "Some kids cannot do cross-age tutoring."
- The upper grade teachers were supposed to do the preparation, training and follow up for tutors, but the upper grade teachers themselves had received no training, and some were against the program.
- The upper grade teachers could not train the tutors because the lower grade teachers have their own methods of teaching the lower grade students.

The coordinator commented that dropping the program to only two times a week helped. She also pulled out the lower ability tutors and the higher ability tutees, so that those who remained were essentially upper grade students

helping those who were having trouble in lower grades. She remarked how very hard it is to get primary teachers to coordinate activities with upper grade teachers. The split between the two groups is a very pronounced one in many schools. The coordinator felt that to have a successful cross-age teaching program in the school, you have to begin with willing teachers and let the program spread itself.

It is perhaps not accidental that we find so many innovative programs at one school. The flexibility required of the staff to try out new procedures is perhaps not to be found in all staffs. Furthermore, one innovation tends to support and encourage other innovations. For example, it was felt that the experience of Early Childhood Education--having to have aides and parents in the classroom--had opened up the classroom and made the teachers able to accept older students in the classroom. In previous years, the teachers alone had been in charge of the classrooms and had not been willing to accept other persons working with "their" children.

We were told that cross-age tutors very much prefer to work with kindergarten and first grade students. During the inter-session, for example, the secondary students who report to the elementary school to act as tutors request kindergarten students most often. They had tried some eighth graders working with sixth graders but found that the eighth graders couldn't handle the tutees in that situation.

We observed inter-session cross-age teaching in about six classrooms. Some students were leading small groups of kindergarteners in games. Others were helping at desks with small group work. In fact, frequently we would walk into a room and not be able to tell immediately, seeing the three or four groups of students, which group was led by the teacher, which by a parent aide, which by a community aide, and which by a cross-age tutor.

The coordinator made the following recommendations:

- There should be a three grade difference between tutors and tutees (8th-4th/5th, 6th-3rd, 5th-2nd, 4th-1st).
- In most circumstances, three times a week is the most cross-age tutoring a tutor can take. Once or twice a week are also successful, depending on the situation, with a time span of usually 30 to 45 minutes.

- Cross-age tutoring works best if teachers are matched up--a specific upper grade teacher sending her children to a specific primary teacher. This hopefully makes for better follow up:
  - --praise from receiving teacher, passed on to sending teacher; both praising cross-age tutoring
  - --problems tutor is having can be better discussed
  - --CAT Achievement Award handed out at assembly
- One-to-one situations are best. Under specific circumstances (a game, learning center) one tutor can work with several tutees.

SITE #4

TYPE OF PROJECT: ☐ teacher aide ☑ cross-school ☑ tutees pull-out — To auditorium
☑ tutorial service ☐ within-school ☐ tutees intact-class
☐ learning-by-tutoring

SCHOOL NEIGHBORHOOD: ☐ urban ☐ predominantly minority ☑ monolingual
☐ suburban ☐ integrated ☐ bilingual
☑ rural ☑ predominantly white

TUTORS GRADE LEVELS: 1 2 3 4 5 6 7 (8) 9 10 11 12 college adult

TUTEES GRADE LEVELS: 1 2 3 (4) (5) 6 7 8 9 10 11 12

SUBJECTS TAUGHT: ☐ math ☐ reading ☐ math and reading ☑ other as prescribed

MATERIALS: ☐ programmed ☐ other purchased ☑ locally developed (a few) ☐ eclectic ☐ no special materials

SIZE OF PROJECT: 1 class of tutors

The elementary school described as Site #3 also receives tutors from a nearby junior high school which is described here as Site #4. The junior high school students are brought over by bus to the elementary school 3 days a week for 35 minutes. They arrange themselves in the multi-purpose room (which is an auditorium or cafeteria according to the need for it). They sit along the long tables, and the elementary school children come from various classrooms to meet with their tutors on a one-to-one basis. Tutoring is an elective class at the junior high school. The school district itself provides funds for the busing.

The amount of interest in tutoring from the elementary school teachers is demonstrated by the fact that of 18 primary teachers, only 2 declined to participate,

and they have since changed their minds. Some parents were demanding that only the teachers teach their children, but they have become used to the cross-age tutoring.

We observed the tutoring in the auditorium/multi-purpose room. We asked a number of students what they were learning from being tutors. Here are some of the replies:

> "You learn to get along with younger children and help them with their problems."
>
> "You learn to be patient with younger people, and when you do it, like you know what a teacher has to go through."
>
> "I feel good about it, that I taught someone to read better."
>
> "Now I know what happens to a teacher when we give them a bad time. Also I help somebody."
>
> "I like kids."
>
> "I learned the way they think (nodding to a little one) by watching them learn."
>
> "I like seeing what other classrooms do. I get ideas for doing things like games. It's fun."

The supervising teacher provides tutors with a folder containing tips for tutoring, hints for tutoring in reading, basic word lists, basic English, reading techniques, a page of the neurological impress method of reading instruction, spelling techniques, etc.

We've been told several times that tutoring two or three times a week is quite sufficient, but when asked, most tutors thought that the Monday and Friday preparation times were more than was necessary, and they would prefer to tutor either four or five days a week. Most of the tutors reported that the tutees arrived for the sessions with instructions from their teachers as to what they were to work on. In general tutors reported that they liked the receiving teacher to send them assignments, although some said that if they could decide what to teach, they could prepare better for the lesson at home.

Most of the pairs of students in the auditorium appeared to be working together well. There were other visitors observing the program, and a band started up towards the end of the tutoring session, but did not seem to disturb anyone.

The supervising teacher said, "I think sometimes an elephant could walk in, and they would just go right on working."

As we have found elsewhere, a number of tutors reported they had signed up to he tutors because of prior experience in summer school or as upper grade student-tutors which showed them what a pleasant experience it was.

SITE #5

TYPE OF PROJECT: ☑ teacher aide ☑ cross-school ☑ tutees pull-out
☐ tutorial service ☐ within-school ☐ tutees intact-class
☐ learning-by-tutoring

SCHOOL NEIGHBORHOOD: ☑ urban ☑ predominantly minority ☑ monolingual
☐ suburban ☐ integrated ☐ bilingual
☐ rural ☐ predominantly white

TUTORS GRADE LEVELS: 1 2 3 4 5 6 7 8 (9) 10 11 12 college adult

TUTEES GRADE LEVELS: (1) (2) (3) (4) (5) (6) 7 8 9 10 11 12

SUBJECTS TAUGHT: ☐ math ☐ reading ☐ math and reading ☑ other as prescribed

MATERIALS: ☐ programmed ☐ other purchased ☐ locally developed ☐ eclectic ☑ no special materials

SIZE OF PROJECT: 1 class of tutors

When asked how the program got started, the principal of the elementary school reported that when he came to the school a few years ago, he realized that vandalism was a great problem. When the junior high schools in the area released their students in the afternoons, teachers at the elementary school were stationed at the gates to keep them off campus. The principal felt that it was necessary to break this state of siege and involve the junior high students and the total community in the school in a much more positive way. The cross-age tutoring program was instituted as a part of a community outreach program called a Community Action Program.

The principal felt that bringing junior high school students on campus succeeded in lessening the vandalism problem, and he no longer stations teachers at the gate to keep students off campus. Unfortunately, this year he was not able to

continue the tutoring program. He stated that it is a "crime" that such an excellent program had to be discontinued. He was simply unable to come up with the funds for a coordinator.

The tutors from the junior high school included any students who volunteered to work as a tutor, including in many cases EMR students, EH students, and even students from a school for wayward girls. The tutors were reported as all undertaking the tutoring seriously as a job. The principal was eventually able to persuade the junior high school to give credit for tutoring, but he felt there were some other problems stemming from the junior high school. For example, tutors who misbehaved at the junior high school were sometimes removed from the tutoring program as a punishment. This indicates that it was a positive program, since threatening removal from it was a means of disciplining the students in their own school.

The tutors were called junior teachers, and they were each provided with a badge designating them as such. They were assigned to teachers in the elementary school to work with a few children in each classroom. All but one of the elementary school teachers had tutors come to their rooms. This would not have been possible, the principal commented, had the teachers not been used to having parent volunteers or aides in the classrooms constantly. The large and very pleasant classrooms were organized in a flexible manner and permitted many activities to be going on at once. As in Site #3, here is another indication of how the climate of the school may influence the acceptability of the program.

The involvement of the tutors, and the extent to which the tutors talked with their parents about the program was demonstrated by the fact that frequently, if a tutor was going to be absent, the parent took the trouble to call the elementary school letting them know that a tutor had to miss his or her tutoring assignment.

Tutors had their own staff room, and sometimes even attended staff meetings. The principal indicated that every effort was made to treat the junior teachers as just that--junior teachers. From one to five junior teachers worked with each teacher that accepted tutors. A full-time coordinator's position was "boot-legged" by increasing class size in other classes. The coordinator met

with tutors in the morning and trained them. If there were any problems, they returned to her. Each Friday they had a feedback session to work on problems that had arisen during the week and prepare for the next week's tutoring.

The principal commented, "Training in techniques of handling younger children is very important because the tutors tend to be very rough on them." The tutors also need to learn some professionalism in that they may see or hear things in the classroom which make them critical of the teacher in the classroom where they're working. This, of course, could threaten the whole program.

Tutors took tutees to visit the junior high school to show them what to expect when they reached that school. The tutors were included in an awards assembly at the elementary school.

Introduction to Sites 6 & 7

History

Working in the Ontario-Montclair School District and influenced by the work of the Lippitts in Chicago, Mr. Scherertz and others developed a Cross-Age Teaching program for which they received a 3-year Title III (ESEA) grant from 1968 to 1971. This development grant was followed by a 1-year dissemination grant enabling them to continue their exemplary program and inform other districts of their perspective and procedures. They received an NIE "Pacesetter" award.

Perspective

Scherertz distinguishes three kinds of programs:

- Cross-age teaching programs in which older students help younger students to the benefit of both, in both academic and social areas. These programs place particular emphasis on the motivational impact that being a tutor has on the low-achieving student who is often not benefiting from the regular classroom.
- Tutoring programs in which somebody (perhaps another student, perhaps a paid paraprofessional or adult volunteer) works on a one-to-one basis with a tutee, for the benefit of the tutee.
- Aide programs in which older students assist teachers with a variety of chores, which might include some tutoring on an as-needed basis.

Dissemination process

Dissemination of the Cross-Age Teaching programs developed by Scherertz and others continues through La Verne College. When a school district contacts La Verne with a request for assistance in setting up a cross-age teaching project, La Verne considers the request in light of the likelihood that the following four essential elements for the implementation of a Cross-age teaching program will be met:

- commitment to the project
- training of tutors
- matching of tutors and tutees on the basis of personality and interests
- communication among program personnel and between personnel and students

If prospects are favorable, a Cross-Age Teaching "Awareness Presentation" is made to administrators. They are then left to take the next step if they wish, the next step being to gather staff for more "Awareness Presentations."

When sufficient staff have received the initial introduction to cross-age teaching and are committed to its concepts, workshops are held. For these workshops a resource manual is available. Teachers learn how to train tutors and can borrow materials for doing so. Schools are urged to adopt the philosophy of the student-centered classroom and the concept that students can help each other and then adapt procedures to their local needs.

Finally, monitoring and follow-up can be provided by La Verne's staff. Scherertz emphasizes that dissemination cannot take place through the mail. People learn from people. That is the basis of tutoring and of schooling, and must be the basis of dissemination.

A typical program involves tutoring 3 days a week. Monday is devoted to the training of tutors and the preparation of materials. Tutors select three activities for each upcoming tutoring day and turn in lesson plans to the supervising teacher. On Tuesday, Wednesday, and Thursday, tutoring sessions of about 40 minutes are held. Tutors chat with the tutee first before teaching. The relationship they establish is viewed by Scherertz as the most critical

part of the whole program. Friday is devoted to "feedback." Tutors and their teacher discuss problems and solutions, brainstorm, and role play.

How were the parents and community involved in Cross-Age Teaching programs? A brief announcement was sent home, keeping a low profile at first. Once the cross-age teaching started, the students could go home and talk of nothing else. Olders who for years have not been mentioning school to parents ("What is there to mention . . . I got another D in English?") started talking about their work helping younger students. Youngers talked about the "new friend" they had . . . The students sold the program to the parents.

If a Cross-Age Teaching program employs a coordinator, does this lead to lack of involvement on the part of the teachers, a danger of no classroom follow-through? It can. If the coordinator trains and supervises students pulled from several classes and the teachers are not involved, many benefits are lost. The teachers of the olders do not see these somewhat academically unsuccessful students in their new successful roles. The teachers' perceptions of them remain unchanged.

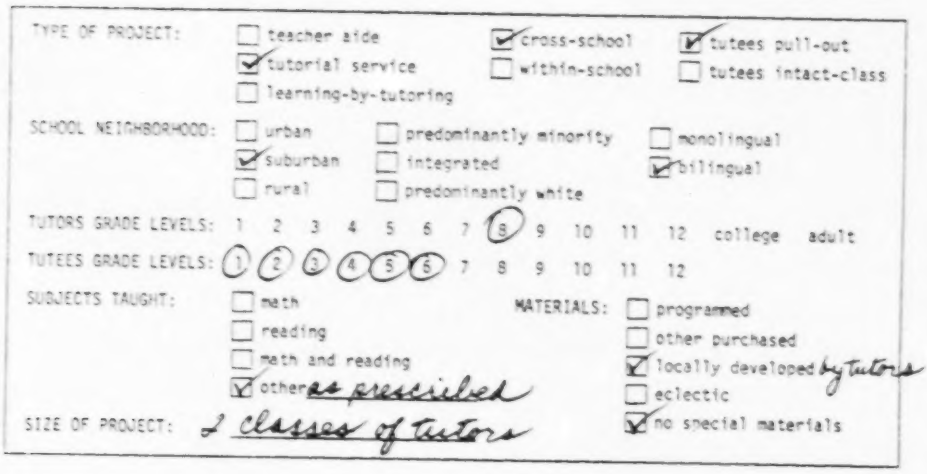
It is essential, therefore, that coordinators work as a team, with sending and receiving teachers, involving them in the program, not remaining apart.

Some off-the-cuff remarks regarding cross-age teaching

- Avoid the word "tutor." The student thinks that to be a tutor, he or she must know a great deal. Speak of "helping the younger child," "olders" and "youngers." Perhaps, also, "tutoring" has a remedial flavor to it. When, instead of tutoring, we speak of "people helping people" it puts the person first, not the subject matter.
- Low and average students tend to make better tutors. They have patience and understanding.
- Never tell the olders what the cross-age teaching will do for them.
- When some students from the elementary school class have left to receive cross-age help in, say, reading, it is essential that the remainder of the class work on reading and not on some other activity the tutees would regret missing.

Students look up to other students who are 2 to 5 years older than they are. Programs should involve cross-age helping, therefore, within the 2 to 5 year range of age differences.

SITE #6

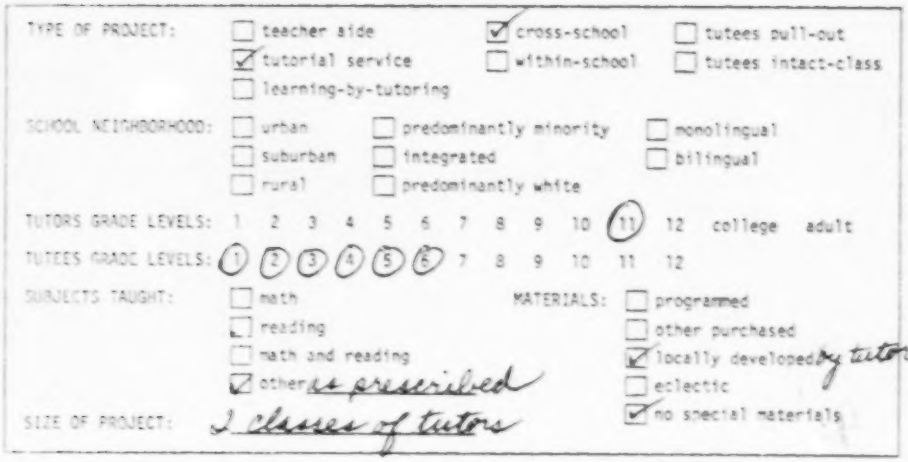


The director of the Cross-Age Tutoring Program prepares and supervises two elective classes in tutoring, each enrolling about 30 students, and he also has responsibility for another service program. Formerly an eighth grade English teacher, he runs workshops on cross-age teaching, aide training ("The Affective Aide") and classroom games.

The student body at the junior high school numbers 800. Since the elective classes run for one semester, approximately 120 students a year tutor. They are bussed to the elementary school where they pull tutees out of class and work with them in various locations--cafeteria, lunch benches, on the bus, etc.

"I don't mention this in training, but I like to pull tutees out of the classroom. We've found this works best because otherwise some receiving teachers won't leave the tutor alone--can't release control." The director also felt that it was very important to find sending teachers with the right attitudes: trust, strong affective concerns, openness, and acceptance.

SITE #7



In this high school, the tutoring program developed in response to some problems of Title I students. At one time, Title I students met for their academic work in classes separate from the non-Title I students. They met for a 3-hour block of time with two teachers. The first of these teachers we interviewed is now a counselor at another high school. She explained that the origins of the tutoring program derived from her thinking of ways to counteract truancy and reading deficiency in these predominantly Mexican-American, Title I students. She had thought of encouraging them to help younger children. When it was noted that the funds for in-service education had not been fully expended, she and the second teacher looked for an in-service workshop to go to and attended one that David Scherertz was conducting in San Diego. The teacher felt that she was hearing her own ideas fully developed at the workshop and developed an immediate affinity with the concepts and approaches to cross-age tutoring represented by Scherertz.

The program that the two teachers then implemented at the high school emphasized heavily the helping relationship and was definitely not pure academics. Training of the tutors was directed towards the tutors having a better understanding of themselves. The tutors were asked, "What causes kids to fail?" They were encouraged to interview students, teachers, and their peers to ask the same question. They found the answers were very often the reasons why they themselves were failing in school--reading difficulties, language problems, family problems. They discussed, then, how it would have helped them, when

they were younger, to have had an older student available to help them learn to read and get along in school--someone to talk to and so on. There is a training tape from Scherertz, and cartoons are used to typify attitudes that children bring to school and to promote discussion of the origin of these attitudes--what has been going on before the child reaches school, why the child is saying he doesn't care, and so on. Role playing is part of this training.

The training of tutors lasted for 3 weeks and finished up with the mapping out of force fields indicating obstacles to succeeding in school. Towards the end of the training, elementary teachers brought interest surveys to the high school. These surveys portrayed the interest of the elementary school students from second to fifth grades--those who were to be tutees. Elementary teachers met with the tutors and told the tutors what was needed. Some were very directive, and others gave very little direction to what tutors were to do. One format that was felt to be very beneficial, once tutoring started, involved the teacher sitting down each day with the tutors and tutees to present the work to them as a group. The tutors would then each take their individual tutee and work on practicing what the teacher had been telling them about.

Following Scherertz's plan, tutors met as a class Mondays and Fridays and tutored Tuesdays, Wednesdays, and Thursdays. On Tuesdays and Wednesdays academic work was stressed and on Thursdays games were played. All tutors kept diaries and self-evaluation sheets. On Mondays, they were required to produce lesson plans, showing one activity for every 10 minutes with the tutee.

The total class of Title I students was matched each semester with the total class of tutees. This was important. Otherwise the teacher was not admitted to the tutoring program. Every student could find something to do in the tutoring program. Students who did not wish to tutor could assist the teacher in walking around and supervising other tutors. Probably an important ingredient in making the tutoring program a great success was that it was not a purely remedial program for tutors. Gifted students and football stars were encouraged to become tutors, and this mix-in with potential drop-outs provided a group that worked very successfully.

After an initial start with the segregated Title I students, the following year tutoring was offered as an elective course. Title I students were encouraged to enroll, but they were no longer in segregated classes and did not have to become tutors. Students usually tutored for one semester.

The teacher, a warm and dedicated person, told of sharing with the tutors her own problems in growing up. She treated tutors as equals. She worked enormously hard on the program, was constantly at work before and after the school day, ran special events, and, as she described it, was exhausted at the end of the day. But she felt that it was the best work she ever did.

The other teacher responsible for implementing this program is now a counselor at the same site as the tutoring program. When interviewed, he revealed that two new teachers were now beginning to train tutors for the cross-age tutoring program. It is now an elective course for which students sign up. In addition to this elective cross-age tutoring, there is also a student tutoring program after school hours, paying $1.65 an hour from student body funds to provide tutors for students who need help.

The teacher noted that the biggest problem in cross-school tutoring programs was transportation and making sure that a person from the secondary school accompanied the students and was on the campus of the elementary school. He commented that a high school principal nearby had no success when he tried cross-age tutoring because he had no transportation available and could send no teacher onto the campus to work with the tutors.

Another problem the teacher noted in cross-age tutoring related to elementary school teachers who didn't understand the helping relationship. When they saw tutors just chatting with the little ones, they sometimes complained that the tutors were not working. Elementary school teachers also sometimes felt that tutees could not leave the classroom because they would be missing their math or other important classwork. Teachers would quote the Stull Bill as a reason why students could not afford to be involved with the tutoring experience.

Regarding parents, he recommended not telling parents until the cross-age tutoring was well underway. On the other hand, he said that he never had any negative feedback from parents and had received a great number of positive comments.

Both teachers reported a temendous change in many of the tutors and that their attendance shot up--many of them had been chronic truants. But one indicated that the positive influence of tutoring on attendance was limited. The truancy rates or non-attendance at school returned to their former high levels when the tutoring was over. It was the commitment of the tutors to their tutees that made them keep coming to school.

Asked about how tutoring programs should be promoted in schools, it was felt the ideal methods began with workshops for receiving teachers. Work on group processes, values clarification, and the philosophy of helping relationships would lead to the commitment of these teachers to the concepts of not purely academic tutoring but a total helping relationship. Then it is necessary to find someone in the school who loves kids and to put this person in charge of the tutoring program.

Introduction to Sites #8 through #14

From 7:30 a.m. to 5:30 p.m., we were riding the freeways of Los Angeles County and Orange County with Mr. Elbert Ebersole, visiting elementary schools which are using his materials: "Programmed Tutoring in Reading." Mr. Ebersole was formerly the principal of Soto Street Elementary School in East Los Angeles. While there, in his last few years as principal, he observed a fifth grade teacher start a cross-age tutoring program which so impressed him that he eventually had the whole school, every single classroom, participating in cross-age tutoring daily. When this program was running, he had as many as 2,000 visitors a year to see it in operation. On his retirement, he continued to develop materials and procedures for tutoring, forming a company, "Eberson Enterprises."

Mr. Ebersole is enormously committed to the concept of cross-age tutoring and to the benefits it can bring to the students involved. We frequently missed freeway turn-offs, or even shot through red lights, as Mr. Ebersole (who was driving) was telling us stories of the children whose lives had been changed by their involvement as tutors.

Mr. Ebersole's procedures involve the training of clusters of teachers with a minimum of two teachers, one from an upper grade classroom and one from a lower grade classroom. Following the training of teachers, the training of tutors begins, and every tutor learns to work with a set of materials designed for use when a younger child reads to him or her. When the little one misses a word, the word is written down in a vocabulary notebook and on a slip of paper. On future occasions, the word is presented to the child. A "1" is marked down on the card if he can read it and a "0" is marked if he cannot read it. The word-card is set aside when there are five "1"s in a row indicating the child has been able to read the word correctly on 5 days in a row. Tutors are trained in word attack skills so that they help the tutees who are reading to them to sound out any word that they cannot read. Tutors are also encouraged to ask good comprehension questions of the little ones who are reading to them.

The materials which Mr. Ebersole sells to schools are inexpensive, costing about $32 for a set of 40 for a classroom. They comprise the materials that are given to the students, tapes that are used in training tutors, and filmstrips as well. The methods are applicable to the reading of any kinds of books which the school has available at any grade level.

The schools we saw with Mr. Ebersole, schools which are currently using his materials and methods, were predominantly middle class elementary schools. Many of them had embraced his methods in total and had involved the whole school in cross-age tutoring. We were able to see many classrooms in which students were sitting in pairs, an older child with a younger child, and reading was taking place, words were being written in vocabulary books, letters were being pointed to on the cards in front of the children, and the total Ebersole model was being followed. Many teachers were exceedingly positive. One had the impression this was "a very practical" program. Frequently, it had started on a small scale in a school and then, as teachers saw its benefits, more of them had adopted it.

SITE #8

TYPE OF PROJECT: ☐ teacher aide ☑ tutorial service ☐ learning-by-tutoring ☐ cross-school ☑ within-school ☑ tutees intact-class

SCHOOL NEIGHBORHOOD: ☐ urban ☑ suburban ☐ rural ☐ predominantly minority ☐ integrated ☑ predominantly white ☑ monolingual ☐ bilingual

TUTORS GRADE LEVELS: 1 2 3 (4) (5) (6) 7 8 9 10 11 12 college adult

TUTEES GRADE LEVELS: (1) (2) (3) 4 5 6 7 8 9 10 11 12

SUBJECTS TAUGHT: ☐ math ☑ reading ☐ math and reading ☐ other_____

MATERIALS: ☐ programmed ☑ other purchased-Eberole ☐ locally developed ☐ eclectic ☐ no special materials

SIZE OF PROJECT: whole school

We met with the tutoring coordinator (who had been voted into this position by the staff who had all accepted a slight increase in class size in order to provide for this non-teaching position), the ECE coordinator (who also worked with the tutoring program), and the principal. Four years ago low reading scores were a source of great concern in the school, and the staff of the school doubled up children on various days so that half the staff were relieved of their classroom responsibilities and could go to surrounding schools to look at reading programs.

The program that caught their attention as having potential for their school was the one at Soto Street Elementary School. Eventually almost the whole staff visited Soto Street School, and they decided to adopt the method themselves. According to the principal, reading scores at the school had been at the 5th and 9th percentile level 10 years ago. Four years ago they were at the 30th percentile. Following the introduction of the cross-age tutoring program, they have reached the 65th percentile level which he is told is exceedingly high given the projections for his school based on socioeconomic status indicators.

The procedures used for tutoring at this school involve the use of the staggered day in the lower grades. That is, half the students in grades 1, 2, and 3 report to school a half hour early, and the other half stay in school a half

hour late. It is during this staggered time that half the students from upper grade classes come to tutor the lower grade classes. The remaining half of the upper grade classes are therefore left with the teacher. It is exceedingly important for such an arrangement that when students are out tutoring, the other half of the class is also working on something academic. If the other half of the class is out for P.E., the tutors become disgruntled.

During the first semester, tutoring occurs daily; and during the second semester, tutoring takes place three times a week. When asked what were the problems associated with a cross-age tutoring program, the principal enumerated three, after stressing that he was totally in favor of the program and was going to tell us about the problems only in order to make us aware of the realistic situation.

The first problem he mentioned was the toughest one--getting teachers on board. There are some who complain to this day, but then there are always teachers complaining about something. The second problem mentioned was the uniform training of teachers. Here Mr. Ebersole's program offers a great advantage, in that college credit is available through LaVerne College for implementing cross-age tutoring in the school. Upper and lower grade teachers pair up to form a cluster consisting of several pairs. They go through the materials and hold meetings in a prescribed sequence. They write regular reports while in the process of receiving their in-service training, training the tutors, and implementing the cross-age tutoring project over a course of about 10 weeks. (For some of the teachers who were at the top of the salary scale and no longer needed any college credit, in-service credit incentives were used.) A series of eight meetings held over 2 or 3 months accomplished their training of teachers.

The third problem is cost. It is critical, the principal said, to have somebody who is responsible for the program--someone who is always there to help with the problems that arise, to train the teachers, to order the materials, to work out the schedule, to train the tutors, and so on. When they first implemented the program, he noted, the staggering was a whole hour. The students in the lower grades came 1 hour early or stayed 1 hour late. This additional 2 hours on the primary teachers' day was not at all popular, so the staggering was changed to a half an hour before and after the normal day. Again, the principal reiterated, he is not only convinced of the academic benefits but of the affective benefits associated with tutoring.

The ECE coordinator who is also a reading specialist stressed the following points:

- There is a need to experiment--to find the best arrangement. She instanced the example of 1 hour being too long in the divided day.
- If the whole school doesn't start at once, she noted, there should be pairs of classes which get started as clusters. This serves as a demonstration. The program grows voluntarily as teachers see the good things that are happening and want to join in.
- Tutors need to be treated with respect, to be told when they're doing well. The receiving teacher sets the tone for the classroom. Many receiving teachers have certificates or an award system to recognize the work that the tutors are doing. You can get by without such reinforcements for the tutors for 2 or 3 months, but beyond that the tutors need some recognition for their hard work.

  In the second semester last year, the reading specialist began to give four points a day to tutors doing a good job of tutoring. Students who had earned a certain number of points could work as an aide with the coordinator. This year she decided she will obtain movies, and tutoring points will lead to permission to attend.
- The drop-off in the interest of the tutors occurred at times when teachers, too, found school difficult, particularly the long stretch between the winter vacation and the spring vacation.

SITE #9

TYPE OF PROJECT: ☐ teacher aide ☐ cross-school ☐ tutees pull-out
☑ tutorial service ☑ within-school ☑ tutees intact-class
☐ learning-by-tutoring

SCHOOL NEIGHBORHOOD: ☐ urban ☐ predominantly minority ☑ monolingual
☑ suburban ☐ integrated ☐ bilingual
☐ rural ☑ predominantly white

TUTORS GRADE LEVELS: 1 2 3 (4) (5) (6) 7 8 9 10 11 12 college adult

TUTEES GRADE LEVELS: (1) (2) (3) 4 5 6 7 8 9 10 11 12

SUBJECTS TAUGHT: ☐ math ☑ reading ☐ math and reading ☐ other_____

MATERIALS: ☐ programmed ☑ other purchased - Ebersole ☐ locally developed ☐ eclectic ☐ no special materials

SIZE OF PROJECT: half the school

At this elementary school they originally sought five teachers to form a cluster to take the LaVerne Training Course, but ended up with 15. We were able, while there, to see about 12 or 13 classrooms in which tutoring was in progress. The classrooms did not appear to have been set up specifically for the tutoring. There were long tables, and down each side of the long tables, sat pairs of students apparently working hard. One teacher had used cardboards to make little partitions that sat on the desk to give the sense of a tutoring booth so that there was less distraction. However, even in the rooms where there was no partitions, most of the students appeared to be working together--the little one reading to the big one, sometimes with difficulty, sometimes with ease. One little second grader was reading quite fluently, and the tutor was sitting by waiting for her to make a slip.

Asked about the applicability of his materials after the point when the child can read, Mr. Ebersole noted that he was developing more materials in the training sessions for asking comprehension questions and getting at the meaning of what was being read. All the students in this school were using the Ebersole materials and seemed to be familiar with what they were to do. Several teachers reported that if a tutor made a mistake, the tutee would correct him, because tutees also know the correct procedures. Teachers we spoke to were exceedingly positive about the program and the materials.

SITE #10

TYPE OF PROJECT:
- ☐ teacher aide
- ☑ tutorial service
- ☐ learning-by-tutoring
- ☐ cross-school
- ☑ within-school
- ☐ tutees pull-out
- ☑ tutees intact-class

SCHOOL NEIGHBORHOOD:
- ☑ urban
- ☐ suburban
- ☐ rural
- ☑ predominantly minority
- ☐ integrated
- ☐ predominantly white
- ☑ monolingual
- ☐ bilingual

TUTORS GRADE LEVELS: 1 2 3 (4) (5) (6) 7 8 9 10 11 12 college adult

TUTEES GRADE LEVELS: (1) (2) (3) 4 5 6 7 8 9 10 11 12

SUBJECTS TAUGHT:
- ☐ math
- ☑ reading
- ☐ math and reading
- ☐ other_____

MATERIALS:
- ☐ programmed
- ☑ other purchased - Ebersole
- ☐ locally developed
- ☐ eclectic
- ☐ no special materials

SIZE OF PROJECT: 4 classes

In this inner-city elementary school one teacher who was interested in tutoring pulled together a cluster to take the LaVerne course, and others came on board at the first meeting when they saw the materials. The teacher we spoke with noted that it "worked like a dream" to pair up younger rough necks with older rough necks: the little ones would really listen to their tutors. She saw the program as alleviating the problems on the school ground as well as in the classroom. The little ones got to know the upper graders and would run around pointing out, "There, that's my tutor." And the tutors would pass by and point out to their friends, "That's my tutee." Bullying was discouraged by the existence of such friendships.

Tutoring was held from 20 to 25 minutes per day. Asked what was the greatest need in starting up such a program, the teacher stated that it was the need to build up interest in teachers. She suggested that either a visit to other schools or a presentation by someone at their own school or school district was the most effective means of arousing interest.

SITE #11

TYPE OF PROJECT: ☐ teacher aide ☐ cross-school ☐ tutees pull-out
☑ tutorial service ☑ within-school ☑ tutees intact-class
☐ learning-by-tutoring

SCHOOL NEIGHBORHOOD: ☐ urban ☐ predominantly minority ☑ monolingual
☑ suburban ☐ integrated ☐ bilingual
☐ rural ☑ predominantly white

TUTORS GRADE LEVELS: 1 2 3 (4) (5) (6) 7 8 9 10 11 12 college adult

TUTEES GRADE LEVELS: (1) (2) (3) 4 5 6 7 8 9 10 11 12

SUBJECTS TAUGHT: ☐ math
☑ reading
☐ math and reading
☐ other_____

MATERIALS: ☐ programmed
☑ other purchased Ebersole
☐ locally developed
☐ eclectic
☐ no special materials

SIZE OF PROJECT: most of school classes

The principal of this elementary school had visited Site #8, and not having any funds, asked Mr. Ebersole to make a presentation for free, which he did. The staff then produced their own materials for use in the classroom modeled on Mr. Ebersole's. Twenty-three out of 30 on the total staff last year implemented cross-age tutoring, and 15 took the LaVerne course for credit paying for it themselves. This school has departmentalization and homogenous grouping in each classroom.

The vice-principal with whom we spoke was extremely positive about the program. When we sat down with some of the staff, however, we heard about some of the problems. Two teachers said, "Well, no, it really didn't work out for us." Their point of view was that they had a low ability class, and though it worked out all right for 2 or 3 weeks, the students then lost interest. They saw this as being entirely due to the kind of students in their class and thought the program was probably very good for other students. Another problem that they noted was the departmentalization in the school which meant that the teachers had only a short time with the students for teaching reading, for example, and they hated to lose any instructional time to tutoring.

The school was not at present implementing cross-age tutoring because of the Open Court reading program currently in use in the first grade. It was felt that problems in the instructional process would arise if tutors who had not been taught in the program attempted to work with tutees who were working with these materials.

SITE #12

TYPE OF PROJECT: ☐ teacher aide ☐ cross-school ☐ tutees pull-out
☑ tutorial service ☑ within-school ☑ tutees intact-class
☐ learning-by-tutoring

SCHOOL NEIGHBORHOOD: ☐ urban ☐ predominantly minority ☑ monolingual
☑ suburban ☐ integrated ☐ bilingual
☐ rural ☑ predominantly white

TUTORS GRADE LEVELS: 1 2 3 (4) (5) (6) 7 8 9 10 11 12 college adult

TUTEES GRADE LEVELS: (1) (2) (3) 4 5 6 7 8 9 10 11 12

SUBJECTS TAUGHT: ☐ math ☑ reading ☐ math and reading ☐ other _____

MATERIALS: ☐ programmed ☑ other purchased - Eberole ☐ locally developed ☐ eclectic ☐ no special materials

SIZE OF PROJECT: whole school

This school employs what is called the "flip-flop system." A teacher with the upper grade pairs with a teacher from the lower grade, and all the students in both classes are given a quick individual test consisting of a series of sight reading works to be read out loud. The number of items missed is marked. On the basis of this quick and simple individual sight reading test, students are ranked in each class. To conduct their tutoring, the lower half of the upper grade class goes to the class of youngers, and the upper half of the younger class goes to the classroom of the older students.

Asked what the response of parents has been to the program, the principal, in his second year at the school, said that the parents had received questionnaires and had expressed no objections. He added that he did get an occasional phone call from an amazed parent saying, "Johnny has a temperature but wants to come to school so that he won't miss his tutee." Other than that, he said there were no complaints. The principal also observed that, following tutoring, there were fewer problems on the playground. The younger children knew some of the older children, and they seemed to get along better because of it. The whole school is involved in cross-age tutoring except for two sixth grade classrooms for which there was no match.

Asked if any of the students became bored with tutoring, one of the teachers said that there were sometimes personality mismatches, and then it was necessary

to switch tutors and tutees. If she received a complaint that a tutor was not getting along with a tutee, she would say, "Well I'll look around and see if anybody is willing to change." In the event that a student did not wish to tutor, the only alternative for that student was to sit and read alone. Consequently, the teacher observed, most students chose to go on tutoring. She commented, as had several of the teachers, on the need for recognition for the tutors. She mentioned they had a party with the upper grade and lower grade classrooms combined at which they had bobbed for apples, had popcorn, and so on. The party had lasted forever, she said laughingly. Several teachers reported improved discipline following the introduction of the tutoring program.

SITE #13

TYPE OF PROJECT: ☐ teacher aide ☐ cross-school ☐ tutees pull-out
☑ tutorial service ☑ within-school ☑ tutees intact-class
☐ learning-by-tutoring

SCHOOL NEIGHBORHOOD: ☐ urban ☐ predominantly minority ☑ monolingual
☑ suburban ☐ integrated ☐ bilingual
☐ rural ☑ predominantly white

TUTORS GRADE LEVELS: 1 2 3 (4) (5) (6) 7 8 9 10 11 12 college adult

TUTEES GRADE LEVELS: (1) (2) (3) 4 5 6 7 8 9 10 11 12

SUBJECTS TAUGHT: ☐ math ☑ reading ☐ math and reading ☐ other_____

MATERIALS: ☐ programmed ☑ other purchased - Ebersole ☐ locally developed ☐ eclectic ☐ no special materials

SIZE OF PROJECT: whole school

This was a school of 850 students with four classes per grade level, located in a middle income community. The principal estimated the average family income at $10,000 to $12,000 a year. A reading specialist acted as a coordinator. Although she suggested a coordinator was not essential, she felt the tutoring program ran better with one person responsible. If there was no reading specialist, then a teacher could be delegated to take responsibility for the program.

This school also follows the Ebersole model very closely. In the year '72-'73, they relied on volunteers among the teachers to participate; in the year '73-'74,

all teachers participated in the cross-age tutoring program. However, recognizing that the initial enjoyment wears a little thin, the staff has organized the program so that tutoring takes place for only 20 minutes a day and for 6 weeks at a time. Then they take a break. By starting late, and tutoring for periods of 6 weeks with breaks in between, they get in a total of about 20 weeks tutoring per year. The principal reported that without question the enthusiasm for tutoring returns to its original high after a break of a few weeks from the program.

The coordinator reported, as did the other teachers, that problems can arise from personality mismatches among tutors and tutees, and that it is sometimes necessary to make a switch. Regarding the potential for boredom among tutors or tutees, the reading specialist said, and the principal agreed, that it was the tutors who become bored occasionally. Asked if they had had any negative reactions from parents, the principal said that there were occasional complaints of misspelled words being sent home and that some of the parents of tutors were unhappy that their children were "losing 20 minutes" out of their instructional time in the school day. Asked if he believed the tutors benefited from the program, he said, "Absolutely."

As for staff acceptance of the program, the principal remarked that the receiving teachers love it; but some sending teachers resent the loss of student time, and there was some dropping out of the project among teachers during the later sessions last year. The principal noted in particular that some students who were frequently sent to the office because of problems such as trouble on the playground, used to sit around the office all day quite happily, but now they were eager to get back to class because they did not wish to miss their tutoring. The coordinator did not feel that tutoring required any special funds to implement.

SITE #14

TYPE OF PROJECT: ☐ teacher aide ☐ cross-school ☐ tutees pull-out
☑ tutorial service ☑ within-school ☑ tutees intact-class
☐ learning-by-tutoring

SCHOOL NEIGHBORHOOD: ☐ urban ☐ predominantly minority ☑ monolingual
☑ suburban ☑ integrated ☐ bilingual
☐ rural ☐ predominantly white

TUTORS GRADE LEVELS: 1 2 3 (4) (5) (6) 7 8 9 10 11 12 college adult

TUTEES GRADE LEVELS: (1) (2) (3) 4 5 6 7 8 9 10 11 12

SUBJECTS TAUGHT: ☐ math ☑ reading ☐ math and reading ☐ other_____

MATERIALS: ☐ programmed ☑ other purchased - Ebersole ☐ locally developed ☐ eclectic ☐ no special materials

SIZE OF PROJECT: whole school

This is a school without walls. It is somewhat integrated and has been receiving some ESAA funds. An ESAA funded teacher attended a workshop regarding tutoring and eventually got the whole school tutoring. They are not, however, using cross-age tutoring this year because the school board does not see it as an appropriate program. Last year, when they had the whole school tutoring, one of the major problems was arranging for the switching of students at the time when tutoring was to take place. The plan they evolved was to start some music and allow 5 minutes for all classes to switch in preparation for the tutoring. It took the children less than 5 minutes to pair up in their classrooms, and the program was very popular.

Again this was a school following the Ebersole model. Mr. Ebersole's materials provide all the steps necessary to implement the program including the test for the matching of students. There was always a chance in this program for tutees to change into tutors. It was the coordinator's opinion that teachers alone, without a coordinator, could have managed the program if they had had Mr. Ebersole's training course. The tutors and tutees watched the overview session of the tutor training package together so that both were familiar with the necessary procedure. The original plan was to have tutoring 4 days a week, but the teachers insisted it occur 5 days a week. The coordinator reported that everyone noticed better discipline during tutoring, that children related to each other better on the playground, and that an older tutor would protect

his or her tutee. Many teachers felt the children looked forward to the one-to-one attention. They had been using the Open Court reading program for 6 years, but it has not been one of the programs listed in the new state adoption list, apparently because feminist groups have complained about the sex bias in the materials.

As had several other teachers, this coordinator mentioned the effectiveness of pairing up a difficult, rambunctious student from the upper grade with a "cut-up" from the lower grade. Mr. Ebersole several times made the point that students "cut-up" in school because they have no other way of showing they're important or getting recognition. If they are involved in a tutoring program, are given recognition and support and can see they are needed by another child in school, it works wonders. Mr. Ebersole's emphasis on the benefits of tutoring is quite even-handed between the cognitive benefits for tutees and the affective benefits for tutors.

Summary to Sites #8 through #14

The schools visited, schools that were using the Ebersole materials called Programmed Tutoring in Reading,* were predominantly white middle class elementary schools. Most of the schools had embraced the Ebersole materials wholeheartedly. A program which is complete in its every component, for which teachers need no other resources, can be very well accepted especially when there is the added incentive to teachers of the possibility of earning college credit.

Although many school personnel that we spoke to were favorable, there was general agreement that tutors in the system became bored after some weeks of tutoring. It must be remembered that these were fourth, fifth and sixth graders who also become bored with regular classwork. Most schools worked out rewards or took breaks and were able to maintain high effort from the young tutors.

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*The materials would be better named "structured" as they have not been developed in a programmed manner as strictly understood.

A Tutoring Coordinator's Account of Her Project

The account presented below was transcribed from a tape recording which Ms. Perry kindly consented to make. This single account covers so well many aspects of tutoring that it was felt important to present it, in toto.

A Report from Fran Perry, Guidance Counselor
Jetton Junior High School, Peducah, Kentucky
(Student population of approximately 625 students)

Initiation

Our tutoring program began as a result of an informal rap session which took place between myself, the principal, and the social worker one day after school. We'd been quite concerned about the low scores on our CTBS-achievement test plus the lack of success that some of our students were having in the classroom. There were also severe discipline problems which we felt were the result of the lack of success that some of the students were experiencing.

A couple of years before, we had a federal program in our school system called Project 8 which was primarily geared toward those students who were potential drop-outs. They had tried a tutoring program at that time on a very small basis. Five of the potential drop-outs who were in the program had worked as tutors with some younger junior high students. It had not been done on a large scale, and there had been no training for the tutors. Although it did not achieve the success hoped for it, the social worker who had been in charge of the program felt that it could be good if carried out in the right way. We felt that by initiating a tutoring program of this sort on a larger scale, and with training for everyone, we might achieve some of the success for which we hoped.

The Lippitt program material had been used, and we began to investigate to see that if, since that time, the materials had been revised. We wrote to some other schools who had used the program to find out what some of the pitfalls were and so on. Eventually we decided to start the program.

The principal asked me to select 70 students from the ninth grade who would be good to work as tutors, to be trained as tutors, and who would provide successful images of the program. I went through my files and carefully selected 70 students. The selection criteria that I used were the attitude of the students towards school, the types of personalities that they had (would they adapt to this type of program?). Grades were not that important because in my selection I had some "D" students all the way up to "A" students. However, as I said, these

students were very carefully selected. They were not potential drop-outs nor behavior problems. We felt that later on we could add some other types of students if we were successful in what we were trying to do. This was a pilot program at first for us. As we started the program preliminary activities included training our students, going to the elementary schools, explaining it to those teachers, and obtaining information as to which teachers wanted tutors.

Difficulties encountered

We found that as the program progressed, we encountered several difficulties, one of which was getting the attendance checked. When our tutors boarded the bus to go to the elementary school, we had no adult supervisor on the bus. We needed to know if these students were going to where they were supposed to be going and to check their attendance. We tried several ideas and finally became very successful with using cards which were punched by a student assigned that responsibility. We would then check the punched cards at the end of the week.

Feedback

We also ran into trouble with finding time for the tutor and the tutee to sit down and discuss their progress. The tutor and teacher also had little time to sit down and talk about, "Well these are some of the things you're doing well," and, "Here are some of the problems." There just seemed to be no time to do this, and we felt like it was very important that it be done at least on a weekly or bi-weekly basis with a fairly short period of time elapsing between discussion sessions.

Reporting absences

We also had a problem with our students reporting to the elementary school if they were sick or if they had to attend some other activities at their own school which prevented them from tutoring. At first I, as coordinator, was trying to do this each day; the students would report to me if they were sick or had other activities. But we found that this was taking away some of the responsibilities intended for the students. Therefore, we had the idea of letting the students themselves call into the secretary at the elementary school just as a teacher would do if she were absent. This seemed to work quite well.

Another difficulty was amusing. We found that contrary to what we thought would happen, some of the good students in the elementary school wanted to fail in order to get a tutor. We thought the opposite would be true; we felt that those students who would have tutors would feel badly because they did. But it seems that the ones who had a tutor were the ones who really were perceived by other students as the top dogs in the class; and therefore, some of the good students began to fail in order to get a tutor. We overcame this difficulty somewhat in trying to spread the tutors around and in giving each child an opportunity to work with a tutor, even if only for a short period of time.

Time allocation

Time was a source of difficulties. Our class periods at the junior high are 55 minutes long. Of course there was travel time required to get to the elementary school and back. It ended up many times that the students would not get to tutor longer than 25 to 30 minutes which really was not enough, and they, as well as the teachers involved, felt

very frustrated. This problem we never completely overcame. If we had been able to continue the program, we had thought about letting the students tutor in a 2-hour block of time. However, we were not able to do this because the program was not continued.

Receiving teachers fears

Convincing teachers who had tutors that they were not being spied upon by the students was another concern. In other words, some of the teachers became almost paranoid that these students were going back and reporting whether or not they were good teachers or taught improperly. We sat down and talked to the teachers about this and explained the procedure was not to check up on any teacher but simply to help the tutor and the tutee achieve as great a success as they could. This seemed to satisfy most of the teachers.

Some of the teachers were leary that additional planning time would be needed to have a tutor, and they felt that they did not have this extra time. As we got into the program, we used teachers who had tutors to convince other teachers that this really was not the case. Once they got organized, it was really less time for them because the tutor was able to do a lot of the things that the teacher ordinarily had done.

When we first started matching tutors, we let the students choose which grade and subject matter they felt most comfortable in working with. We found that this sometimes was a problem because a lot of the students prefer first and second grade for some reason, and we simply did not have enough places for those students. We found that there were many more students who wanted to tutor than there were places available, and it became a job for us, as coordinators, to get out and sell the program to teachers who previously had not had tutors. However, we felt like we did a really good job with this.

Preparing receiving teachers

One of the areas not covered by our program was the training of the teachers who were to get tutors. This was a difficulty for us. To solve this problem, the other coordinator and myself simply sat down and wrote up a training program for teachers. We did not do any research comparing those teachers who had training and those who had not; but we feel that, after talking with the teachers who had spent the first year without training and the second year with training, it was a very great benefit to them in working with the tutors. We found that in some cases a student who was acting as a tutor became a paper grader or a bulletin board person and had little opportunity to work with kids. When we had the training, we found that some of the people who were doing this simply did not know how to use a tutor. This training helped in this area a great deal.

An indicator of student satisfaction

The program grew from approximately 70 students, as I said in the beginning, to 300. An interesting thing occurred after the first year when the program still had 70 students. I made an open announcement over the intercom and asked for those students who were interested in the tutoring program to come to the auditorium. I expected maybe

100-125 students. When I got down to the auditorium, the middle section was completely filled with students, and I would estimate there were 300-350 students wanting to tutor. This really speaks for itself as far as success in our tutoring program is concerned.

Expansion to content areas outside basic skills and to a nursing home

We expanded our tutoring program into mini-courses which were offered at the elementary school and taught by our ninth graders in such areas as piano, fire arm safety, macramé, modern dance, gymnastics, basketball, cheerleading, vocal music, and several other areas in which our ninth graders felt competent. The elementary schools would explain this program to their students, and they would elect to take a class 1 day a week for an hour in any one of those areas. The students would sign up for the particular area in which they were interested.

In addition, we expanded this program to reach into a nursing home. We bussed students into the nursing homes where they worked with adults, read to them, and did some crafts with these people. In a sense it was the kids tutoring the adults, and what satisfaction these adults gained! I saw a lady 80 years old smile, for the first time in months I was told, because she knew someone cared and someone came and someone read to her. Furthermore, some students admitted that they had not liked "old people" until they worked with them in the nursing home.

Program benefits

People often asked, "Just what are the benefits of the program?" There are many, and I'll try to elaborate a little bit on these.

Tutor self-confidence

Our program expanded from one elementary school to four elementary schools. Other people heard about our program, wanted to be a part of it, and therefore it was expanded. We found that tutors who had little self-confidence became more confident in their own junior high classroom. We had students who were tutoring who felt that they were not very worthy individuals; and we found that through this program, through testing on a scale, that the students who were tutors became more confident in their abilities.

Tutor attitude to school

Tutors' grades improved at the junior high school; some of those students who previously had not had good grades became better students. I think this improvement could be attributed to tutoring, helping the student in the elementary school do well in school and seeing how important it was. I think the tutor incorporated these ideas into his own thinking as he worked in his own classroom.

Teacher empathy

Tutors who were discipline problems in their own classrooms became more aware of teacher problems in their own school setting. They became more thoughtful and considerate of the teacher than they were before because this time they were teachers themselves and could understand and relate to the problems of a teacher.

Tutee cognitive benefits

Tutees improved more rapidly in reading and math skills. Some students who would not work with their regular teacher became very interested in their classwork as long as they could work with a tutor. Leadership opportunities were opened up for followers. Some of our tutors who had never been in a leadership position became leaders and felt really good about this.

Tutor leadership

Tutor satisfaction in helping others

Of course there was a great deal of satisfaction from these students in helping others. Sessions were held once a month where we would get together with those tutors who had been working in the elementary school. Over and over, this satisfaction of helping others became very apparent. The school attendance of not only the tutors but the tutees became very apparent. They seemed to want to come to school now because they had a reason. And again, this goes along with a more positive attitude toward school. It wasn't such a bad place anymore because they had a function and a reason for being there.

Attitudes to others

We found that there was a lot of tolerance developed for differences from one student to the next. Some students who might have held racial prejudices found that when they sat down and worked with a student of another race, they said, "Hey, you know, they aren't so different from me after all." Or given a little student who was really a slow learner, tutors found that they must develop patience in order to work with this student. When they really succeeded in working with this student, you would not believe the inner-satisfaction that these tutors received.

All students did not gain equally from the program: some benefitted, of course, a lot more than others; some benefitted only slightly; and I would say there were those students who did not benefit at all. But overall, I would say 95 percent of the students taking part in this program achieved a great deal from it.

Parent response

Parents were very supportive of the program as long as their child was not pulled out of a regular class to do the tutoring. Many parents phoned to say that for the first time they didn't have to drag their kids out of bed in the morning.

A problem student's dramatic change

One of the most interesting experiences I had related to this was a student who was taking a P.E. class. (P.E. was held on Monday, Wednesday, and Friday, with study hall on Tuesday and Thursday--the tutoring time came from the study hall periods.) This particular student hated P.E. He would go, but he really hated it. He did not achieve success in that area nor did he achieve success in any academic areas. Toward the end of one semester, the P.E. teacher came up and talked with me about the student and said, "Hey, Johnnie has not been in P.E. class for the last 2 months. What's happened to him?" On tracing this down, we found that this student had gone and tutored every single day of the week instead of going to P.E. 3 days and to tutoring only 2 days. He had just gone tutoring every single day and had not been discovered. His mother told us that she had seen a

tremendous change in her son since tutoring--he was more alive, more considerate of others, and felt that life had something to offer him. Whereas before, he had been put down and criticized by other people, now the kids looked up to him in the tutoring program because he did a really bang-up job. We got the P.E. problem ironed out and, of course, scolded him for not going to P.E. We feel, however, that this says a lot for the program. We're not advocating that students not go to class or P.E., but we are saying that this particular student achieved success where he had never achieved success anywhere else.

End of program

The program was ended because of lack of funding for the gas for the buses and for paying the bus drivers. We were funded under ESAA, and we had hoped to continue the program, but funding withdrawal prevented this. It was a real blow for us especially because we had to cut out the nursing home program, too, because the buses were not funded.

Overall assessment

I feel that the reaction of parents, students, and teachers was the most positive of any program we've ever initiated at our school. I've been there 6 years, and I have never seen a more positive reaction to a program--all the way around--than it was for this tutoring program. It reached more students and brought success to students who otherwise would never have achieved success.

As I close, I guess I'd like to quote one of our elementary teachers who had tutors from the very beginning. As part of our training program for teachers, we recorded her thoughts on the tutoring program and her ideas on how a tutor could be used in the classroom. I guess you've heard the famous commercial about the orange juice: "A day without orange juice is a day without sunshine." I think this teacher expressed the feelings of parents, teachers and students alike when she said, as she looked at her tutors, "A day without tutors is like a day without sunshine." And maybe that's a corny line, but that's exactly the way we feel about our tutoring program. If there was any way for us to refund the program and get it back into operation, we would.

It's been about 2 years since we've had the tutoring program, and different students come up to me at least once a week saying, "Miss Perry, when are we going to get to tutor? We really want to. Isn't there anything we can do to be able to tutor?" That in itself says a lot for our program.

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